website:http://biz.LGservice.com
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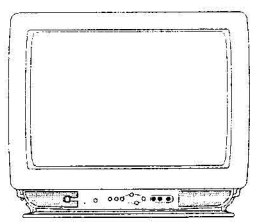
# COLOR TV
# SERVICE MANUAL

**CHASSIS : MC-84A**

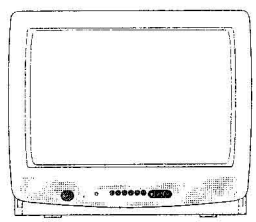
## MODEL : CF-14/20/21F60/X CF-14/20/21F80X
## CT/CF-14/20/21K50/52E/X /54ET
## CT/CF-14/16/20/21S10E/X/12E

**CAUTION**
BEFORE SERVICING THE CHASSIS,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.

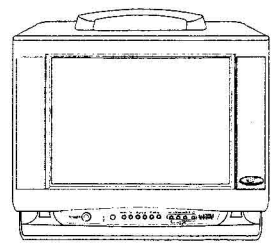
**CF-20/21F60/X**



**CF-20/21F80X**



**CF-14/20/21K50/52EX**



# CONTENTS


Contents ..... 2

Safety Precautions ..... 3

Servicing Precautions ..... 4

Specifications ..... 6

Control Descriptions ..... 8

Disassembly Instructions ..... 10

Adjustment ..... 11

Troubleshooting ..... 15

Exploded View ..... 18,20,22,24

Exploded View Parts List ..... 19,21,23,25

Replacement Parts List ..... 26

SVC. Sheet .....

# SAFETY PRECAUTIONS

## IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by ⚠ in the Schematic Diagram and Replacement Parts List.
It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent X-RADIATION, Shock, Fire, or other Hazards.
Do not modify the original design without permission of manufacturer.

### General Guidance

An **Isolation Transformer should always be used** during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks.

It will also protect the receiver and it's components from being damaged by accidental shorts of the circuitary that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB.

Keep wires away from high voltage or high temperature parts.

Due to high vacuum and large surface area of picture tube, extreme care should be used in **handling the Picture Tube**. Do not lift the Picture tube by it's Neck.

### X-RAY Radiation

***Warning:***

The source of X-RAY RADIATION in this TV receiver is the High Voltage Section and the Picture Tube.
For continued X-RAY RADIATION protection, the replacement tube must be the same type tube as specified in the Replacement Parts List.

To determine the presence of high voltage, use an accurate high impedance HV meter.

Adjust brightness, color, contrast controls to minimum.
Measure the high voltage.
The meter reading should indicate
23.5 ± 1.5KV: 14-19 inch, 26 ± 1.5KV: 19-21 inch,
29.0 ± 1.5KV: 25-29 inch, 30.0 ± 1.5KV: 32 inch
If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.

### Before returning the receiver to the customer,

always perform an **AC leakage current check** on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

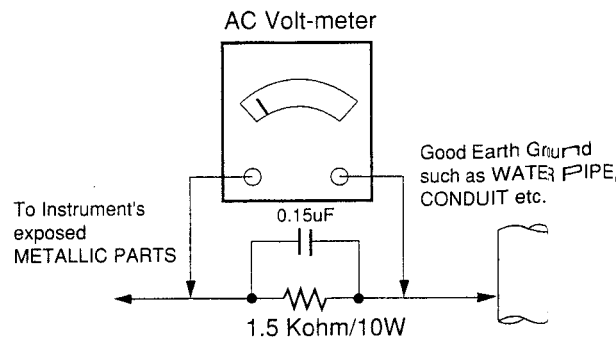
### Leakage Current Cold Check(Antenna Cold Check)

With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on positioin, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.
If the exposed metallic part has a return path to the chassis, the measured resistance should be between 1MΩ and 5.2MΩ.
When the exposed metal has no return path to the chassis the reading must be infinite.
An other abnormality exists that must be corrected before the receiver is returned to the customer.

### Leakage Current Hot Check (See below Figure)

Plug the AC cord directly into the AC outlet.
**Do not use a line Isolation Transformer during this check.**
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.
Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity.
Reverse plug the AC cord into the AC outlet and repeat AC voltage measurements for each esposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which is corresponds to 0.5mA.
In case any measurement is out of the limits sepcified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.

### Leakage Current Hot Check circuit



# SERVICING PRECAUTIONS

**CAUTION:** Before servicing receivers covered by this service manual and its supplements and addenda, read and follow the *SAFETY PRECAUTIONS* on page 3 of this publication.
*NOTE:* If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions on page 3 of this publication, always follow the safety precautions. Remember: Safety First.

**General Servicing Precautions**

1. Always unplug the receiver AC power cord from the AC power source before;
   a. Removing or reinstalling any component, circuit board module or any other receiver assembly.
   b. Disconnecting or reconnecting any receiver electrical plug or other electrical connection.
   c. Connecting a test substitute in parallel with an electrolytic capacitor in the receiver.
      **CAUTION:** A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
   d. Discharging the picture tube anode.
2. Test high voltage only by measuring it with an appropriate high voltage meter or other voltage measuring device (DVM, FETVOM, etc) equipped with a suitable high voltage probe. Do not test high voltage by "drawing an arc".
3. Discharge the picture tube anode only by (a) first connecting one end of an insulated clip lead to the degaussing or kine aquadag grounding system shield at the point where the picture tube socket ground lead is connected, and then (b) touch the other end of the insulated clip lead to the picture tube anode button, using an insulating handle to avoid personal contact with high voltage.
4. Do not spray chemicals on or near this receiver or any of its assemblies.
5. Unless specified otherwise in this service manual, clean electrical contacts only by applying the following mixture to the contacts with a pipe cleaner, cotton-tipped stick or comparable nonabrasive applicator; 10% (by volume) Acetone and 90% (by volume) isopropyl alcohol (90%-99% strength)
   **CAUTION:** This is a flammable mixture.
   Unless specified otherwise in this service manual, lubrication of contacts in not required.
6. Do not defeat any plug/socket B+ voltage interlocks with which receivers covered by this service manual might be equipped.
7. Do not apply AC power to this instrument and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
8. Always connect the test receiver ground lead to the receiver chassis ground before connecting the test receiver positive lead.
   Always remove the test receiver ground lead last.
9. *Use with this receiver only the test fixtures specified in this service manual.*
   **CAUTION:** Do not connect the test fixture ground strap to any heatsink in this receiver.

**Electrostatically Sensitive (ES) Devices**

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called *Electrostatically Sensitive (ES) Devices.* Examples of typical ES devices are integrated circuits and some fieldeffect transistors and semicounductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed to prevent potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static type solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficent to demage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a repalcement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   **CAUTION:**Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the bruching together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

**General Soldering Guidelines**

1. Use a grounded-tip, low-wattage soldering iron and appropriate tip size and shape that will maintan tip temperature within the range or 500° F to 600° F.
2. Use an appropriate gauge of RMA resin-core solder composed of 60 parts tin/40 parts lead.
3. Keep the soldering iron tip clean and well tinned.
4. Thorohly clean the surfaces to be soldered. Use a mall wirebristle (0.5 inch, or 1.25cm) brush with a metal handle. Do not use freon-propelled spray-on cleaners.
5. Use the following unsoldering technique
   a. Allow the soldering iron tip to reach normal temperature. (500° F to 600° F)
   b. Heat the component lead until the solder melts.
   c. Quickly draw the melted solder with an anti-static, suction-type solder removal device or with solder braid.
      **CAUTION:** Work quickly to avoid overheating the circuiboard printed foil.
6. Use the following soldering technique.
   a. Allow the soldering iron tip to reach a normal temperature (500° F to 600° F)
   b. First, hold the soldering iron tip and solder the strand against the component lead until the solder melts.

c. Quickly move the soldering iron tip to the junction of the component lead and the printed circuit foil, and hold it there only until the solder flows onto and around both the component lead and the foil.
**CAUTION:** Work quickly to avoid overheating the circuit board printed foil.
d. Closely inspect the solder area and remove any excess or splashed solder with a small wire-bristle brush.

**IC Remove/Replacement**
Some chassis circuit boards have slotted holes (oblong) through which the IC leads are inserted and then bent flat against the circuit foil. When holes are the slotted type, the following technique should be used to remove and replace the IC. When working with boards using the familiar round hole, use the standard technique as outlined in parapraphs 5 and 6 above.

*Removal*
1. Desolder and straighten each IC lead in one operation by gently prying up on the lead with the soldering iron tip as the solder melts.
2. Draw away the melted solder with an anti-static suction-type solder removal device (or with solder braid) before removing the IC.

*Replacement*
1. Carefully insert the replacement IC in the circuit boare.
2. Carefully bend each IC lead against the circuit foil pad and solder it.
3. Clean the soldered areas with a small wire-bristle brush. (It is not necessary to reapply acrylic coating to the areas).

**"Small-Signal" Discrete Transistor Removal/Replacement**
1. Remove the defective transistor by clipping its leads as close as possible to the component body.
2. Bend into a "U" shape the end of each of three leads remaining on the circuit board.
3. Bend into a "U" shape the replacement transistor leads.
4. Connect the replacement transistor leads to the corresponding leads extending from the circuit board and crimp the "U" with long nose pliers to insure metal to metal contact then solder each connection.

**Power Output, Transistor Device Removal/Replacement**
1. Heat and remove all solder from around the transistor leads.
2. Remove the heatsink mounting screw (if so equipped).
3. Carefully remove the transistor from the heat sink of the circuit board.
4. Insert new transistor in the circuit board.
5. Solder each transistor lead, and clip off excess lead.
6. Replace heatsink.

**Diode Removal/Replacement**
1. Remove defective diode by clipping its leads as close as possible to diode body.
2. Bend the two remaining leads perpendicula y to the circuit board.
3. Observing diode polarity, wrap each lead of the new diode around the corresponding lead on the circuit board.
4. Securely crimp each connection and solder it.
5. Inspect (on the circuit board copper side) the solder joints of the two "original" leads. If they are not shiny, reheat them and if necessary, apply additional solder.

**Fuse and Conventional Resistor Removal/Replacement**
1. Clip each fuse or resistor lead at top of the circuit board hollow stake.
2. Securely crimp the leads of replacement component around notch at stake top.
3. Solder the connections.
**CAUTION:** Maintain original spacing between the replaced component and adjacent components and the circuit board to prevent excessive component temperatures.

**Circuit Board Foil Repair**
Excessive heat applied to the copper foil of any printed circuit board will weaken the adhesive that bonds the foil to the circuit board causing the foil to separate from or "lift-off" the board. The following guidelines and procedures should be followed whenever this condition is encountered.

*At IC Connections*
To repair a defective copper pattern at IC connections use the following procedure to install a jumper wire on the copper pattern side of the circuit board. (Use this technique only on IC connections).

1. Carefully remove the damaged copper pattern with a sharp knife. (Remove only as much copper as absolutely necessary).
2. carefully scratch away the solder resist and acrylic coating (if used) from the end of the remaining copper pattern.
3. Bend a small "U" in one end of a small gauge jumper wire and carefully crimp it around the IC pin. Solder the IC connection.
4. Route the jumper wire along the path of the out-away copper pattern and let it overlap the previously scraped end of the good copper pattern. Solder the overlapped area and clip off any excess jumper wire.

*At Other Connections*
Use the following technique to repair the defective copper pattern at connections other than IC Pins. This technique involoves the installation of a jumper wire on the component side of the circuit board.

1. Remove the defective copper pattern with a sharp knife. Remove at least 1/4 inch of copper, to ensure that a hazardous condition will not exist if the jumper wire opens.
2. Trace along the copper pattern from both sides of the pattern break and locate the nearest component that is directly connected to the affected copper pattern.
3. Connect insulated 20-gauge jumper wire from the lead of the nearest component on one side of the pattern break to the lead of the nearest component on the other side. Carefully crimp and solder the connections.
**CAUTION:** Be sure the insulated jumper wire is dressed so the it does not touch components or sharp edges.

# SPECIFICATIONS

**Note:Specifications and others are subject to change without notice for improvement.**

- **Power requirement:**
  AC 100-270V, 50/60Hz (Cold SMPS)
- **Tuning system:**
  VS (Voltage Synthesizer), 100 program memory
- **Sound output:**
  2.5W Typ.:5.0W Max, at 50KHz Deviation (Mono)
  12Wmax. X 2way
- **Control buttons on the TV:**
  Menu, OK, Vol+, Vol-, Pr+, Pr-
- **Intermediate Frequency (IF):**
  Vision IF ; 38.0MHz
  Color IF ; 33.57MHz(PAL)
  34.42MHz(NTSC)
  Sound IF ; 32.5MHz (B/G)
  32.0MHz(I, I/I)
  31.5MHz(D/K, K1)
  33.5MHz(M)
- **Power consumption :**
  14":70W(80W), 16":75W(85W), 20": 80W(90W), 21": 85W(95W)
  * ( ):Used Stereo Board.
- **Antenna input impedance :**
  VHF/UHF 75ohm , Unbalanced type
- **Voice coil impedance:**
  8ohm
- **OSD (On Screen Display) :**
  Menu method
  OSD Language option; English/other languages or English only
- **External in/output: Earphone, SCART or Phone Jack : Option**
  Audio-In ; 0.5Vrms±3dB, over 10Kohm
  Audio-Out ; 0.5Vrms±3dB, below 1Kohm
  Video-In/Out ; 1Vp-p±3dB, 75ohm
  R.G.B In ; 0.7Vp-p±3dB
- **Function:**
  Teletext(TOP/FLOF/LIST) ┐
  UBB(Ultra Bass Booster) │ Option
  CATV/Hyper band │
  Eye ┘
  Power ball game
  Auto Program
  Manual Program
  Auto Sleep
  Quick view
  Recall
  ACMS(Auto channel Memory System)
  PSM(Picture Status memory)
  CSM(Color Status memory)
- **Child Lock:**
  In the Lock on state the TV can only be operated by the Remote controller.
  If any button on the front panel is pressed, "CHILD LOCK ON" is displayed on the screen but the button's function is not performed.
  To cancel of this mode, select lock off with menu button on Remote control only.

- **Receiving System**

| No | Model No. / System | CT- | CF- | CA- | CY- | CD- RF3.58 | CZ- |
|---|---|---|---|---|---|---|---|
| 1 | PAL-B | O | O | O | X | O | O |
| 2 | PAL-G | O | O | O | X | O | O |
| 3 | PAL-I, I/I | O | O | X | O | O | O |
| 4 | PAL-D | O | O | X | X | O | O |
| 5 | PAL-K | O | O | X | X | O | O |
| 6 | SECAM-B | O | O | X | X | X | X |
| 7 | SECAM-G | O | O | X | X | X | X |
| 8 | SECAM-D | O | O | X | X | X | X |
| 9 | SECAM-K | O | O | X | X | X | X |
| 10 | SECAM-K1 | O | O | X | X | X | X |
| 11 | SECAM-I (6.0) | O | O | X | X | X | X |
| 12 | SECAM-L (AV) | O | O | X | X | X | X |
| 13 | NTSC-3.58/4.5 | O | X | X | X | O | X |
| 14 | NTSC-3.58/5.5 | O | O | O | X | O | O |
| 15 | NTSC-3.58/6.0 | O | O | X | O | O | O |
| 16 | NTSC-3.58/6.5 | O | O | X | X | O | O |
| 17 | NTSC-3.58/4.5(50) | O | X | X | X | O | X |
| 18 | NTSC-4.43/5.5 | O | O | O | X | O | O |
| 19 | NTSC-4.43/6.0 | O | O | X | O | O | O |
| 20 | NTSC-4.43/6.5 | O | O | X | X | O | O |
| 21 | PAL 5.5/60Hz | O | O | O | X | O | O |
| 22 | PAL 6.0/60Hz | O | O | X | O | O | O |
| 23 | PAL 6.5/60Hz | O | O | X | X | O | O |
| 24 | SECAM 5.5/60Hz | O | O | X | X | X | X |
| 25 | SECAM 6.0/60Hz | O | O | X | X | X | X |
| 26 | SECAM 6.5/60Hz | O | O | X | X | X | X |
| **TOTAL SYSTEM** | | 26 | 24 | 5 | 4 | 16 | 14 |

## *Table 1:* Receiving System (26 System)

| No | Receiving System | Function | Receiving Channel |
|---|---|---|---|
| 1 | **PAL-B** | Reception of broadcast and play-back for Video Tape Recorder | **VHF Band**<br>PAL/SECAM-B : **2-12**<br>PAL/SECAM-D : **1-12**<br>SECAM-K1 : **2-9**<br>NTSC-M (US) : **2-13**<br>NTSC-M (JAPAN) : **1-12**<br>**UHF Band**<br>PAL/SECAM-G : **21-69**<br>PAL-I : **21-69**<br>SECAM-K : **21-69**<br>PAL-K : **13-56**<br>NTSC-M (US) : **14-78**<br>NTSC-M (JAPAN) : **13-62** |
| 2 | **PAL-G** | | |
| 3 | **PAL-I, I/I** | | |
| 4 | **PAL-D** | | |
| 5 | **PAL-K** | | |
| 6 | **SECAM-B** | | |
| 7 | **SECAM-G** | | |
| 8 | **SECAM-D** | | |
| 9 | **SECAM-K** | | |
| 10 | **SECAM-K1** | | |
| 11 | **NTSC-M** | | |
| 12 | NTSC 4.43/5.5MHZ | Play-back for special Video Tape Recorder | |
| 13 | NTSC 4.43/6.0MHZ | | |
| 14 | NTSC 4.43/6.5MHZ | | |
| 15 | SECAM-I (6.0MHZ) | | |
| 16 | SECAM-L (Video In) | | |
| 17 | NTSC 3.58/4.5MHZ/50HZ | Play-back for special Video Tape/Video disk player | |
| 18 | PAL 5.5MHZ/60HZ | | |
| 19 | PAL 6.0MHZ/60HZ | | |
| 20 | PAL 6.5MHZ/60HZ | | |
| 21 | SECAM 5.5MHZ/60HZ | | |
| 22 | SECAM 6.0MHZ/60HZ | | |
| 23 | SECAM 6.5MHZ/60HZ | | |
| 24 | NTSC 3.58/5.5MHZ | Play-back for special Video Tape Recorder | |
| 25 | NTSC 3.58/6.0MHZ | | |
| 26 | NTSC 3.58/6.5MHZ | | |

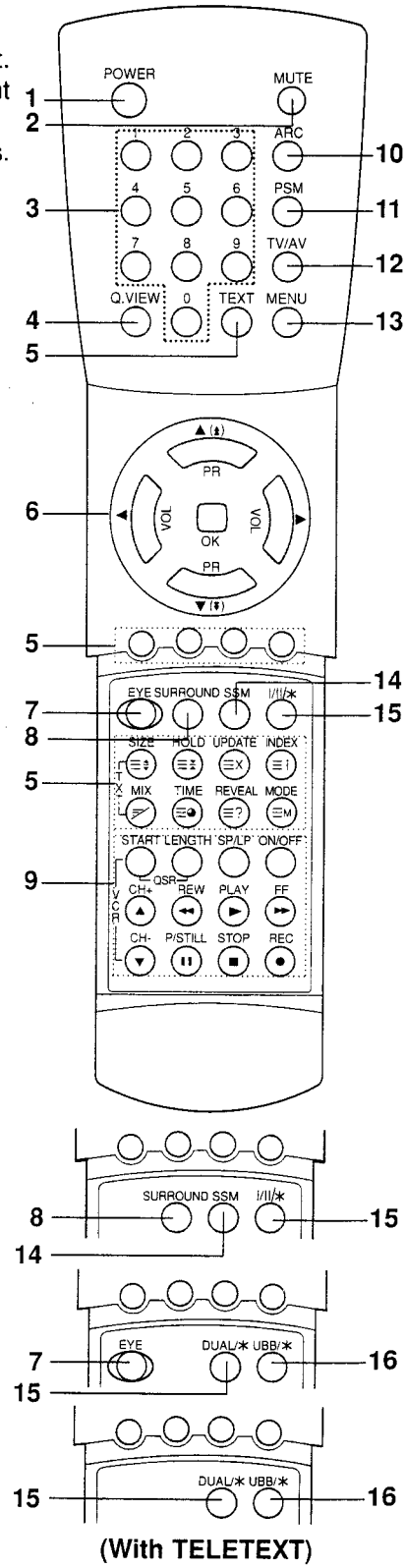
**NOTE :** CF/CT/CA/CY/CD - ****T - - FOR TELETEXT AND NICAM MODEL.
CF/CT/CA/CY/CD - ****N - - FOR NICAM MODEL.
CF/CT/CA/CY/CD - ****X - - FOR TELETEXT MODEL.
CF/CT/CA/CY/CD - ****E - - FOR EYE MODEL.

# DESCRIPTION OF CONTROLS

## Remote control handset

All the functions can be controlled with the remote control handset. Some functions can also be adjusted with the buttons on the front panel of the set.
Before you use the remote control handset, please install the batteries.

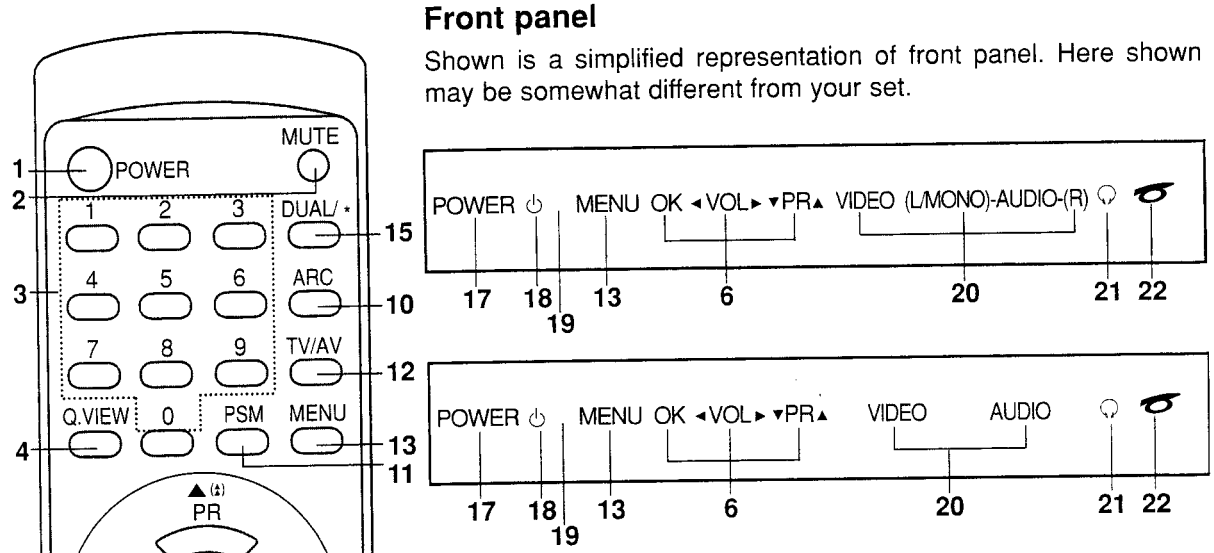
1. **POWER**
   switches the set on from standby or off to standby.
2. **MUTE**
   switches the sound on or off.
3. **NUMBER BUTTONS**
   switch the set on from standby or directly select a number.
4. **Q.VIEW**
   returns to the previously viewed programme.
5. **TELETEXT BUTTONS (option)**
   These buttons are used for teletext.
   For further details, see the 'Teletext' section.
6. **▲(+)/▼(-) (Programme Up/Down)**
   switches the set on from standby.
   selects a programme or a menu item.
   scans programmes automatically.
   **◄ / ► (Volume Down/Up)**
   adjusts the volume.
   adjusts menu settings.
   **OK**
   accepts your selection or displays the current mode.
7. **EYE (option)**
   switches the Eye function on or off.
8. **SURROUND**
   selects surround sounds.
9. **VCR BUTTONS (option)**
   control a LG video cassette recorder.
10. **ARC (Aspect Ratio Control)**
    changes the picture format.
11. **PSM (Picture Status Memory)**
    recalls your preferred picture setting.
12. **TV/AV**
    selects TV or AV mode.
    clears the menu from the screen.
13. **MENU**
    selects a menu.
14. **SSM (Sound Status Memory)**
    recalls your preferred sound setting.
15. **I/II or DUAL/✳ (option)**
    selects the language during dual language broadcast.
    selects the sound output.

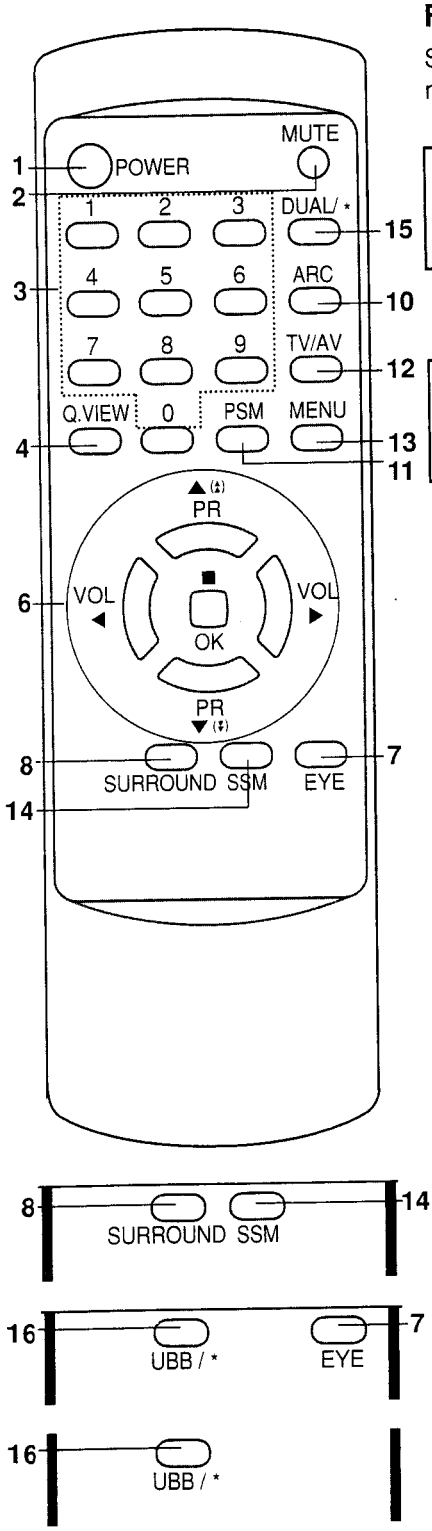



**(With TELETEXT)**

## Front panel

Shown is a simplified representation of front panel. Here shown may be somewhat different from your set.













**(Without TELETEXT)**

**16. UBB/✳(option)**
switches the UBB sound on or off.

**17. MAIN POWER**
switches the set on or off.

**18. POWER/STANDBY INDICATOR ( ⏻ /stand-by)**
illuminates brightly when the set is in standby mode.
dims when the set is switched on.

**19. REMOTE CONTROL SENSOR**

**20. AUDIO/VIDEO IN SOCKETS (AV2) (option)**
Connect the audio/video out sockets of external equipment to these sockets.

**21. HEADPHONE SOCKET (option)**
Connect the headphone plug to this socket.

**22. EYE (option)**
adjusts picture according to the surrounding conditions.
***Note :*** *Eye is an optional function. Only a set with the eye option can perform this function.*

***Note :***
✳*: No function.*

# DISASSEMBLY INSTRUCTIONS

### Important note
This set is disconnected from the power supply through the converter transformer. An isolating transformer is necessary for service operations on the primary side of the converter transformer.

### Back Cabinet Removal
Remove screws residing on the back cabinet and carefully separate the back cabinet from the front cabinet..

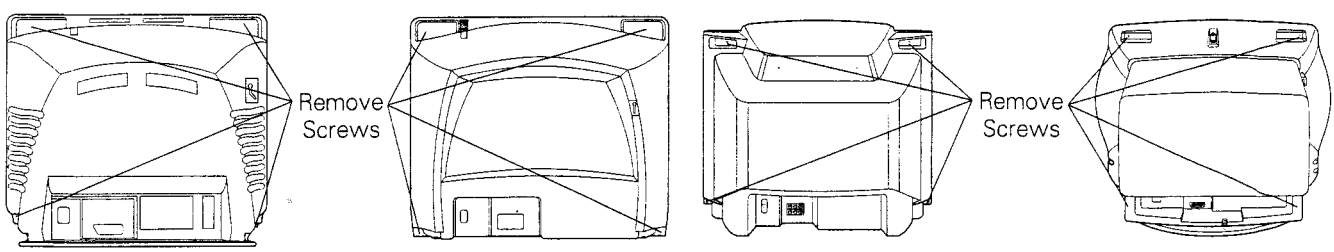
### CPT Removal
1. Pull out the CPT board from the CPT neck.
2. Place the front cabinet on soft material not to mar the front surface or damage control knobs.
3. Remove 4 screws securing the picture tube mounting brackets to the front cabinet.
4. Carefully separate CPT from the front cabinet.

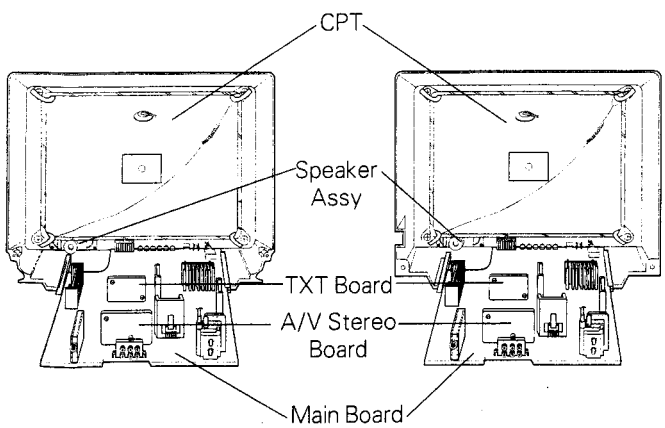
### Chassis Assy Removal
Grasp both side of Frame and pull it backward smoothly.

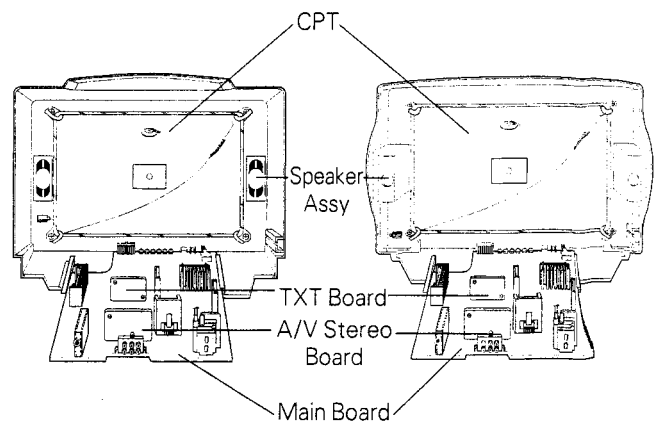
### Speaker Assy Removal
1. Remove P601, P602 connector from Main Board.
2. Remove respective 2 screws for tweeter speaker(R, L) and 4 screws for squawker speaker(R, L) on the front cabinwet.
3. Refer ro Exploded View for disassembling woofer speaker in the back cover.

### PICTURE TUBE HANDLING CAUTION
Due to high vacuum and large surface area of picture tube, great care must be exercised when handling picture tube. Always lift picture tube by grasping it firmly around faceplate.
NEVER LIFT TUBE BY ITS NECK! The picture tube must not be scratched or subjected to excessive pressure as fracture of glass may result in an implosion of considerable violence which can cause personal injury or property damage.

**CF-20/21F60/X** **CF-20/21F80X** **CF-14/20/21K50E/52E/X** **CF-14/16/20/21S10E/S12E/X**



# ADJUSTMENT

## □ Safety Precautions

1. It is safe to adjust after using insulating transformer between the power supply line and chassis input to prevent the risk of electric shock and protect the instrument.
2. Never disconnect leads while the TV receiver is on.
3. Don't short any portion of circuits while power is on.
4. The adjustment must be done by the correct appliances. But this is changeable in view of productivity.
5. Unless otherwise noted, set the line voltage to 230Vac± 10%, 50Hz.

## □ Test Equipment required

1. RF signal generator (with pattern generator)
2. DC Power Supply
3. Multimeter (volt meter)
4. Oscilloscope
5. Color analyzer

### ● RF AGC (Automatic Gain Control) Adjustment

| | |
|---|---|
| Test Point | **: AGC TP (J2)** |
| Adjust | **: Remote Control** |

The RF AGC was aligned at the time of manufacture for optimum performance over a wide range conditions. Readjustment of RF AGC should not be necessary unless unusual local conditions exist, such as ;

1) Channel interference in a CATV system.
2) Picture bending and/or color beats, which are unusually due to excessive RF signal input when the receiver is too close to a transmitting tower or when the receiver is connected to an antenna distribution system where the RF signal has been amplified. In this case, the input signal should be attenuated (with pad or filter) to a satisfactory level.
3) Picture noise caused by "broadcast noise" or weak signal. If the broadcast is "clean" and the RF signal is at least 1mV (60dBu), the picture will be noise free in any area.

Adjusting RF AGC to one end of rotation will usually cause a relatively poor signal to noise ratio;
Adjusting to the other end of rotation will usually cause a degradation of over load capabilities resulting in color beats or adjacent channel interference.

**Adjustment**

1. Connect RF signal (60dB±1dB) and turn on the TV.
2. Press OK buttons on TV set and Remote Controller at the same time to get into SVC mode.
3. Press Channel UP/DOWN button on the Remote Controller several times to find AGC ??.
4. Press Volume UP/DOWN button until the AGC Voltage is the same as the Table below.
5. Press OK( ■ ) button to memorize the data.

| TUNER | 6700VPF002A(ALPS) | 6700VPF003B(LGEC) |
|---|---|---|
| AGC Voltage | 3.5 ± 0.1V | 2.7 ± 0.1V |

### ● Screen Voltage Adjustment

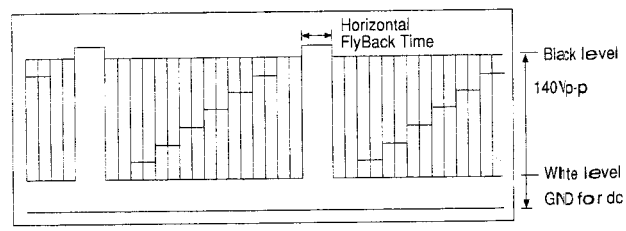
| | |
|---|---|
| Test Point | **: RK (Red Cathode of CPT Board)** |
| Adjust | **: Screen Control of FBT** |

1) Tune the TV set to receive a digital pattern.
2) Press PSM (RED) button on remote controller. (standard picture)
3) Connect the probe of oscilloscope to the RK (Red Cathode) of CPT Board.

※ Rk Test Point (TP)

| CPT TYPE | Test Point | CPT LIST |
|---|---|---|
| HI-FO | TP1 | LG 20", 21" |
| SNN | TP2 | LG 14", ORION 14", 20", 21" |

4) Adjust Screen Volume of FBT so that the waveform is the same as below figure.




The waveform of RK(Red Cathode) of CPT Board

### ● Focus Adjustment

**NOTE:** This adjustment should be performed after warming up for 10 minutes.

| | |
|---|---|
| Test Point | **: Observing Display** |
| Adjust | **: Focus control of FBT** |

1) Tune the TV set to receive an inactive channel station.
2) Adjust the Focus control of FBT for best overall focus.

## ● Deflection Data Adjustment (Line SVC-1)

**NOTE:** To enter SVC mode, press "OK" buttons on both TV set and the Remote control at the same time.

### 1. Preparation for Deflection Adjustment

1) At SVC mode, press the Yellow colored button.
   If the Remote Controller doesn't have the Yellow button, you should use a Service Remote Control (105-201G) and press SVC button.
   And then, deflection data adjustment OSD (SVC1 mode) will be displayed.
2) Press Channel UP/DOWN button for desirous function Adjustment.
3) Press Volume UP/DOWN button to adjust the data.

### 2. Deflection Adjustment Procedure

**1) Vertical Adjustment**
Slect VS and adjust until the mechanical center of CPT and that of screen coincides and select VA and adjust to coincide the inner circle of screen with outer frame of CPT.

**2) Horizontal Adjustment**
Select HS and adjust until the mechanical center of CPT and that of screen coincides.

**3) Vertical S Correction Adjustment**
Select SC and adjust until top-bottom side pincushion are equal.

**4)** Press OK( ■ ) button to memorize the data.

## ● White Balance Adjustment.(LINE SVC-0)

**NOTE :** This adjustment should be performed after screen voltage adjustment.

1) Tune the TV set to receive an 100% white pattern.
2) Press OK( ■ ) buttons on TV set and remote controller at the same time to get into SVC mode.
3) Press Channel UP/DOWN button for desirous function adjustment.
4) Adjust VOL+ or VOL- button for GG031.
5) Adjust VOL+ or VOL-button in each status of "Rg--"/"Bg--" for X=281±8, Y=288±8 with color analyzer.
6) Press OK( ■ ) button to memorize the adjustment data.

| Status | Adjustment | Range | Initial Data | Remark |
|---|---|---|---|---|
| RG | R-Drive | 0~63 | 32 | |
| GG | G-Drive | 0~63 | 31 | |
| BG | B-Drive | 0~63 | 27 | |

## ● Hold Down check

Short J139 and ZD747 and check if the TV set turns into stand-by.

### 3. Deflection Initial Setup Data

| Status | Default | 21" LG | 20" LG | 14" LG | ORION 14" | ORION 16" | ORION 20" | ORION 21" |
|---|---|---|---|---|---|---|---|---|
| VL | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 |
| VS | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| VA | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| HS | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| SC | 10 | 10 | 10 | 5 | 5 | 5 | 5 | 5 |

## ● Stereo Amp Adjustment(LINE SVC-2)

* Real Stereo Model ONLY

| Average ADJ. Data List | | |
|---|---|---|
| FP | FM Prescaller | 18 |
| NP | Nicam Prescaller | 72 |
| SP | Scart Prescaller | 40 |
| SV | Scart Volume | 55 |

* INABLE HOTEL TV(LIMIT VOLUME)

| | | |
|---|---|---|
| MAXVOL | 1-100 | |

## ● OPTION Adjustment (SVC MODE:OPTION-1, OPTION-2)

**NOTE:** When the EEPROM has been replaced, the Option data should be restored as the function of individual system and specification.

1) Press OK buttons on both TV set and Remote Controller at the same time to get into SVC mode.
2) Press the Yellow button several times to find OPTION-1 or OPTION-2.
3) Input the correspond OPTION data referring to Table below with the numeric buttons 0~9.

**Table 1. OPTION 1 Function**

| Option | Code | Function | Remark |
|---|---|---|---|
| SYSTEM | 00 | BG+I+DK | W/O RF 3.58(CF-, CZ-) |
| | 01 | BG+I+DK+M | with RF3.58(CT-, CD-) |
| | 10 | ONLY | Single SYSTEM(CA-) |
| | 11 | ONLY+DUAL | South East Asian DUAL |
| SCART | 0 | PHONO JACK (AV1) | |
| | 1 | SCART JACK (AV1) | with RGB Input |
| EYE | 0 | W/O EYE | |
| | 1 | with EYE | |
| UBB | 0 | W/O UBB | UBB for S-MAX(MONO) MODEL |
| | 1 | with UBB | |
| AV2 | 0 | W/O AV2 (Front) | TOOL Option |
| | 1 | with AV2 (Front) | |

**Table 2. Specifications for OPTION-1 data**

| OPTION Data | SYSTEM | SCART | EYE | UBB | AV2 |
|---|---|---|---|---|---|
| 0 | 00 | 0 | 0 | 0 | 0 |
| 1 | 00 | 0 | 0 | 0 | 1 |
| 2 | 00 | 0 | 0 | 1 | 0 |
| 3 | 00 | 0 | 0 | 1 | 1 |
| 4 | 00 | 0 | 1 | 0 | 0 |
| 5 | 00 | 0 | 1 | 0 | 1 |
| 6 | 00 | 0 | 1 | 1 | 0 |
| 7 | 00 | 0 | 1 | 1 | 1 |
| 8 | 00 | 1 | 0 | 0 | 0 |
| 9 | 00 | 1 | 0 | 0 | 1 |
| 10 | 00 | 1 | 0 | 1 | 0 |
| 11 | 00 | 1 | 0 | 1 | 1 |
| 12 | 00 | 1 | 1 | 0 | 0 |
| 13 | 00 | 1 | 1 | 0 | 1 |
| 14 | 00 | 1 | 1 | 1 | 0 |
| 15 | 00 | 1 | 1 | 1 | 1 |
| 16 | 01 | 0 | 0 | 0 | 0 |
| 17 | 01 | 0 | 0 | 0 | 1 |
| 18 | 01 | 0 | 0 | 1 | 0 |
| 19 | 01 | 0 | 0 | 1 | 1 |
| 20 | 01 | 0 | 1 | 0 | 0 |
| 21 | 01 | 0 | 1 | 0 | 1 |
| 22 | 01 | 0 | 1 | 1 | 0 |
| 23 | 01 | 0 | 1 | 1 | 1 |
| 24 | 01 | 1 | 0 | 0 | 0 |
| 25 | 01 | 1 | 0 | 0 | 1 |
| 26 | 01 | 1 | 0 | 1 | 0 |
| 27 | 01 | 1 | 0 | 1 | 1 |
| 28 | 01 | 1 | 1 | 0 | 0 |
| 29 | 01 | 1 | 1 | 0 | 1 |
| 30 | 01 | 1 | 1 | 1 | 0 |
| 31 | 01 | 1 | 1 | 1 | 1 |
| 32 | 10 | 0 | 0 | 0 | 0 |
| 33 | 10 | 0 | 0 | 0 | 1 |
| 34 | 10 | 0 | 0 | 1 | 0 |
| 35 | 10 | 0 | 0 | 1 | 1 |
| 36 | 10 | 0 | 1 | 0 | 0 |
| 37 | 10 | 0 | 1 | 0 | 1 |
| 38 | 10 | 0 | 1 | 1 | 0 |
| 39 | 10 | 0 | 1 | 1 | 1 |
| 40 | 10 | 1 | 0 | 0 | 0 |
| 41 | 10 | 1 | 0 | 0 | 1 |
| 42 | 10 | 1 | 0 | 1 | 0 |
| 43 | 10 | 1 | 0 | 1 | 1 |
| 44 | 10 | 1 | 1 | 0 | 0 |
| 45 | 10 | 1 | 1 | 0 | 1 |
| 46 | 10 | 1 | 1 | 1 | 0 |
| 47 | 10 | 1 | 1 | 1 | 1 |
| 48 | 11 | 0 | 0 | 0 | 0 |
| 49 | 11 | 0 | 0 | 0 | 1 |
| 50 | 11 | 0 | 0 | 1 | 0 |
| 51 | 11 | 0 | 0 | 1 | 1 |
| 52 | 11 | 0 | 1 | 0 | 0 |
| 53 | 11 | 0 | 1 | 0 | 1 |
| 54 | 11 | 0 | 1 | 1 | 0 |
| 55 | 11 | 0 | 1 | 1 | 1 |
| 56 | 11 | 1 | 0 | 0 | 0 |
| 57 | 11 | 1 | 0 | 0 | 1 |
| 58 | 11 | 1 | 0 | 1 | 0 |
| 59 | 11 | 1 | 0 | 1 | 1 |
| 60 | 11 | 1 | 1 | 0 | 0 |
| 61 | 11 | 1 | 1 | 0 | 1 |
| 62 | 11 | 1 | 1 | 1 | 0 |
| 63 | 11 | 1 | 1 | 1 | 1 |

**Table 3. OPTION 2 Function**

| Option | Code | Function | Remark |
|---|---|---|---|
| FFI | 0 | Normal Condition | Fast Filter IF-PLL |
| | 1 | FFI Active | (for excessive RF signal) |
| CHINA | 0 | W/O Chinese NICAM | Chinese Model only |
| | 1 | Chinese NICAM | |
| LANG. | M | Multi Language (M=0) | Language varies by |
| | E | English Only (E=1) | MICOM Part No. |
| HOTEL | 0 | W/O HOTEL | for Buyer 's request |
| | 1 | For HOTEL | |
| GAME | 0 | W/O GAME | POWER BALL |
| | 1 | With GAME function | |

**Table 4. Specifications for OPTION-2 data**

| OPTION Data | FFI | CHINA | LANG. | HOTEL | GAME |
|---|---|---|---|---|---|
| 0 | 0 | 0 | M | 0 | 0 |
| 1 | 0 | 0 | M | 0 | 1 |
| 2 | 0 | 0 | M | 1 | 0 |
| 3 | 0 | 0 | M | 1 | 1 |
| 4 | 0 | 0 | E | 0 | 0 |
| 5 | 0 | 0 | E | 0 | 1 |
| 6 | 0 | 0 | E | 1 | 0 |
| 7 | 0 | 0 | E | 1 | 1 |
| 8 | 0 | 1 | M | 0 | 0 |
| 9 | 0 | 1 | M | 0 | 1 |
| 10 | 0 | 1 | M | 1 | 0 |
| 11 | 0 | 1 | M | 1 | 1 |
| 12 | 0 | 1 | E | 0 | 0 |
| 13 | 0 | 1 | E | 0 | 1 |
| 14 | 0 | 1 | E | 1 | 0 |
| 15 | 0 | 1 | E | 1 | 1 |
| 16 | 1 | 0 | M | 0 | 0 |
| 17 | 1 | 0 | M | 0 | 1 |
| 18 | 1 | 0 | M | 1 | 0 |
| 19 | 1 | 0 | M | 1 | 1 |
| 20 | 1 | 0 | E | 0 | 0 |
| 21 | 1 | 0 | E | 0 | 1 |
| 22 | 1 | 0 | E | 1 | 0 |
| 23 | 1 | 0 | E | 1 | 1 |
| 24 | 1 | 1 | M | 0 | 0 |
| 25 | 1 | 1 | M | 0 | 1 |
| 26 | 1 | 1 | M | 1 | 0 |
| 27 | 1 | 1 | M | 1 | 1 |
| 28 | 1 | 1 | E | 0 | 0 |
| 29 | 1 | 1 | E | 0 | 1 |
| 30 | 1 | 1 | E | 1 | 0 |
| 31 | 1 | 1 | E | 1 | 1 |

## ● HOTEL TV Mode

**NOTE:** This mode is useful for HOTEL TV MODEL. Dealer or HOTEL manager can use this option.
HOTEL TV FUNCTION has two powerful function

**1. AFTER SELECTING HOTEL MODE, CAN NOT CHANGE INITIAL SET UP CONDITION.**

- CHANNEL PROGRAM(AUTO PROGRAM, MANUAL PROGRAM, EDIT FUNCTION) and OSD LANGUAGE set up condition is fixed so the HOTEL lodger cannot change and remove initial set up data condition at his pleasure.
  This function prevents HOTEL lodger from needless changing channel memory data and OSD language condition.
  It will be helpful for maintainning the best suitable condition of TV SET

**2. Limit MAX. VOLUME LEVEL.**

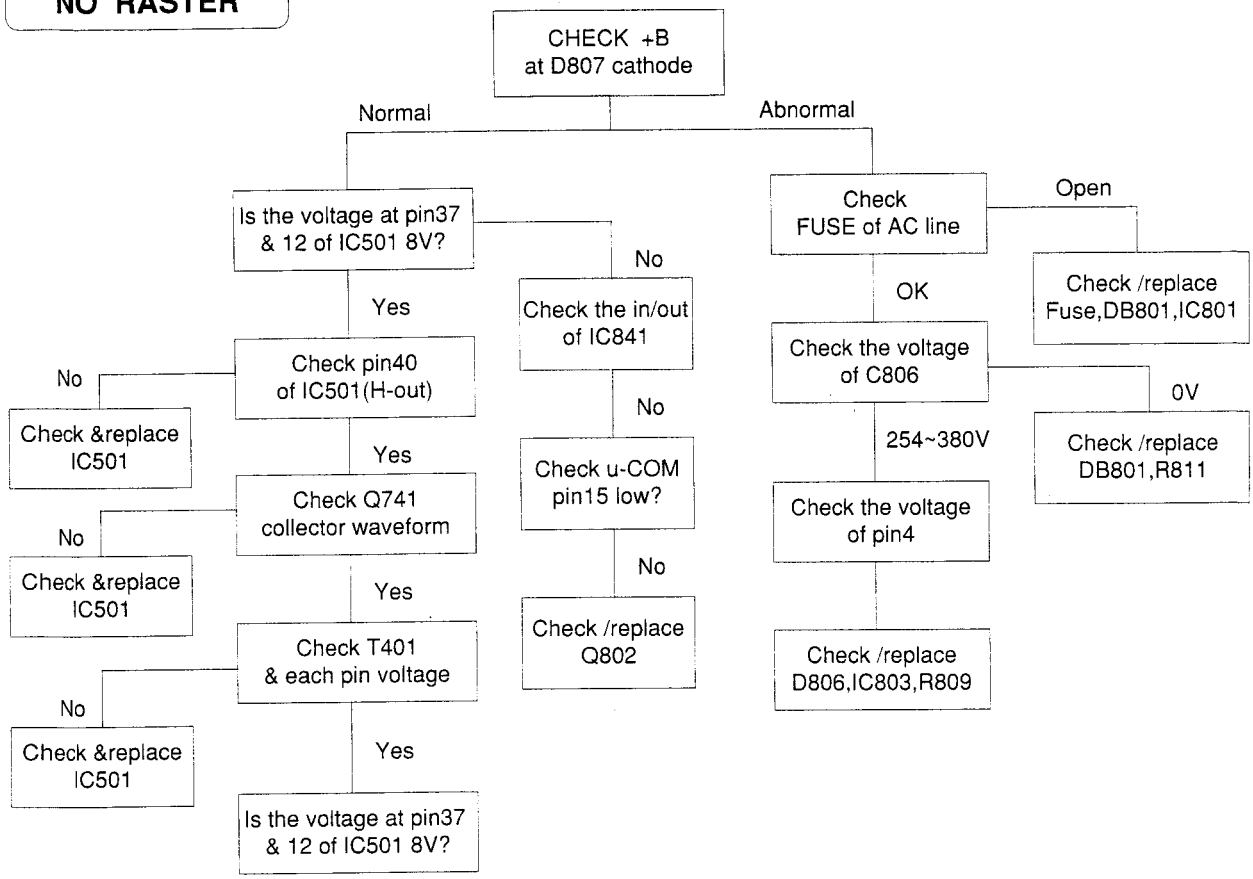
- The HOTEL lodger can only use limited range of volume level because loud TV sound can disturb other lodger's private business.
  The HOTEL manager select maximum volume level proper for HOTEL.

**▶ HOTEL mode operating guide**

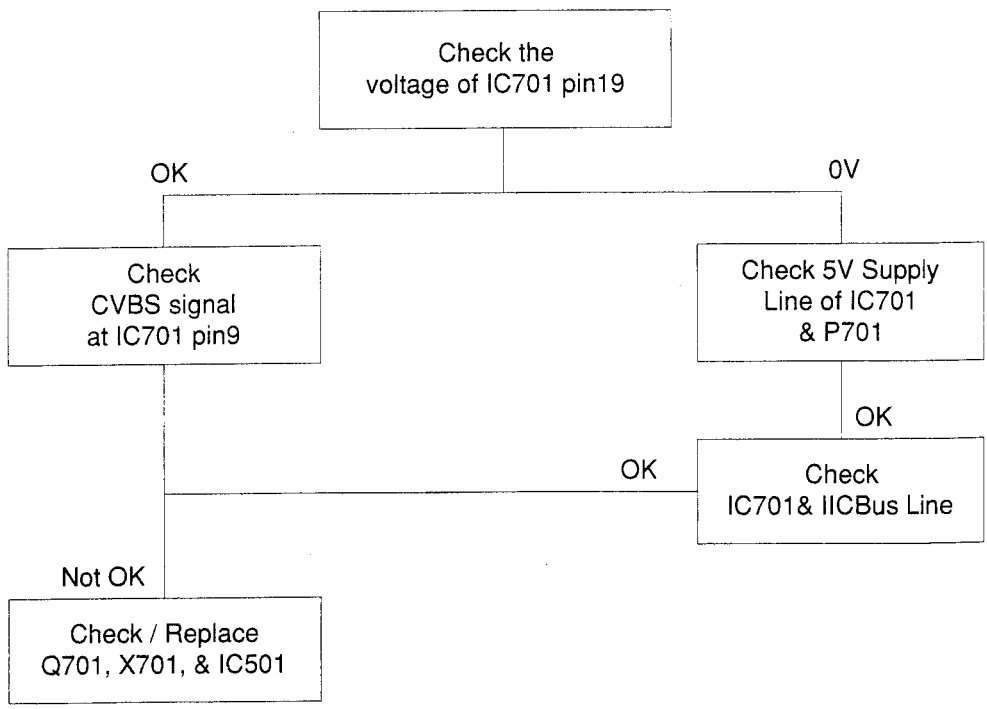
① SET UP(CH.SEARCH AND EDIT) the Channel Program
② SET UP Proper max volume level in SVC Mode.
③ SET UP HOTEL option in SVC Mode(OPTION-2).

# TROUBLESHOOTING

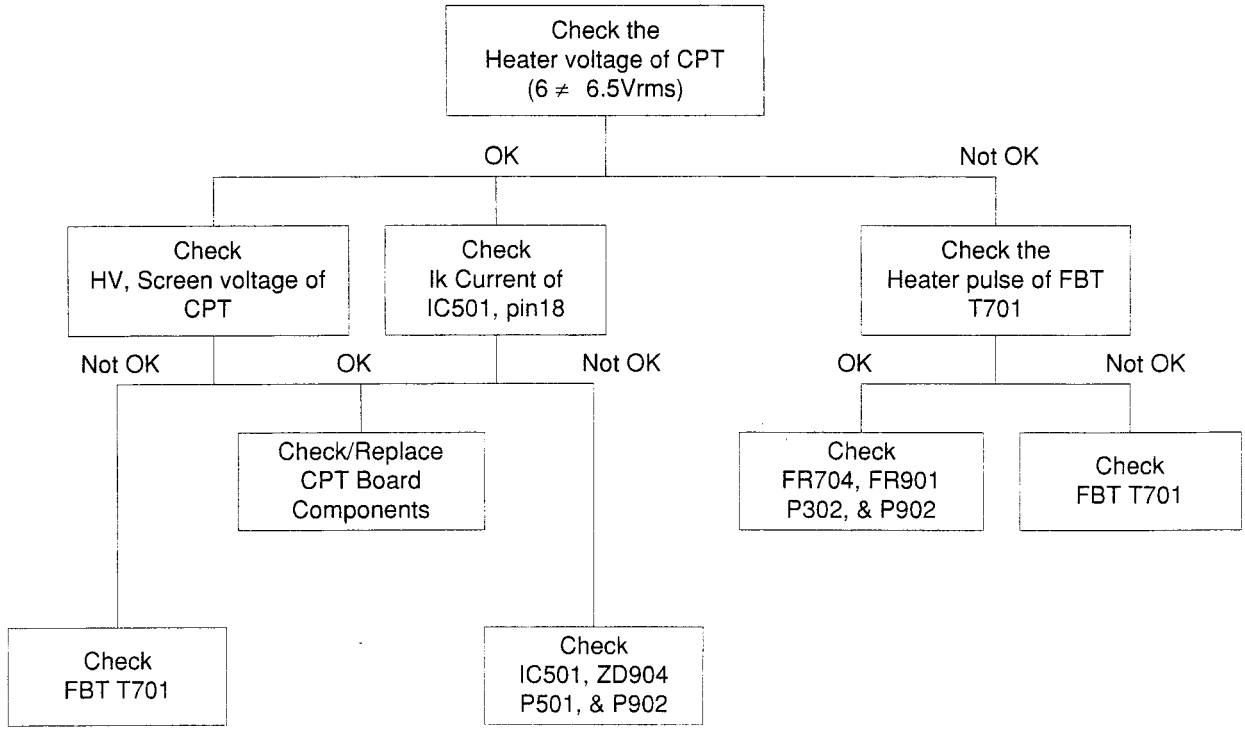
## NO RASTER



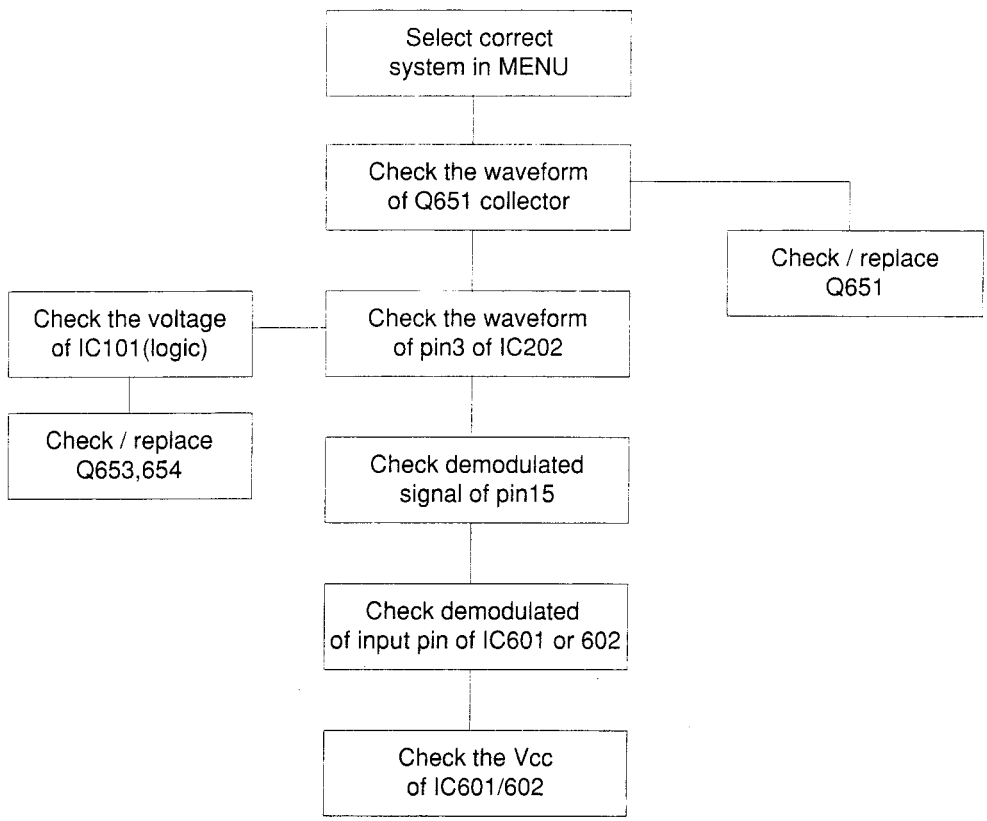

## NO TELETEXT



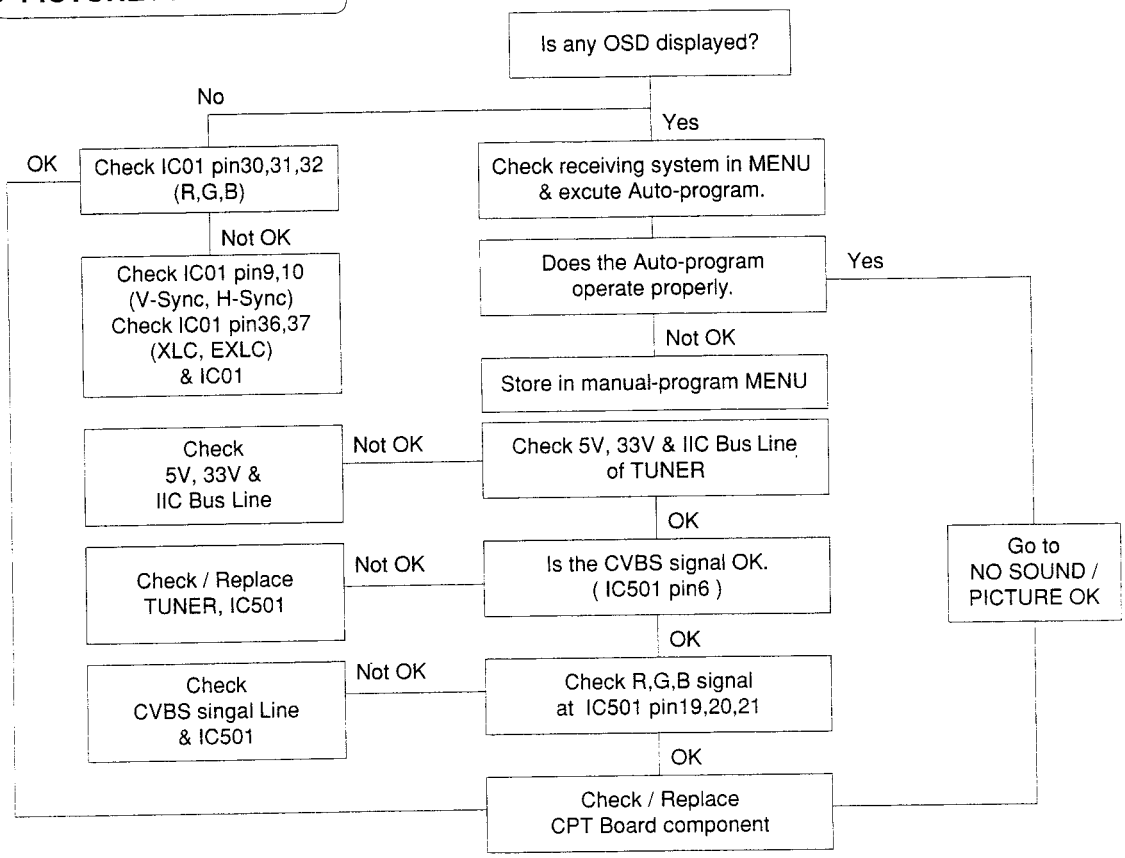
## NO RASTER / SOUND OK



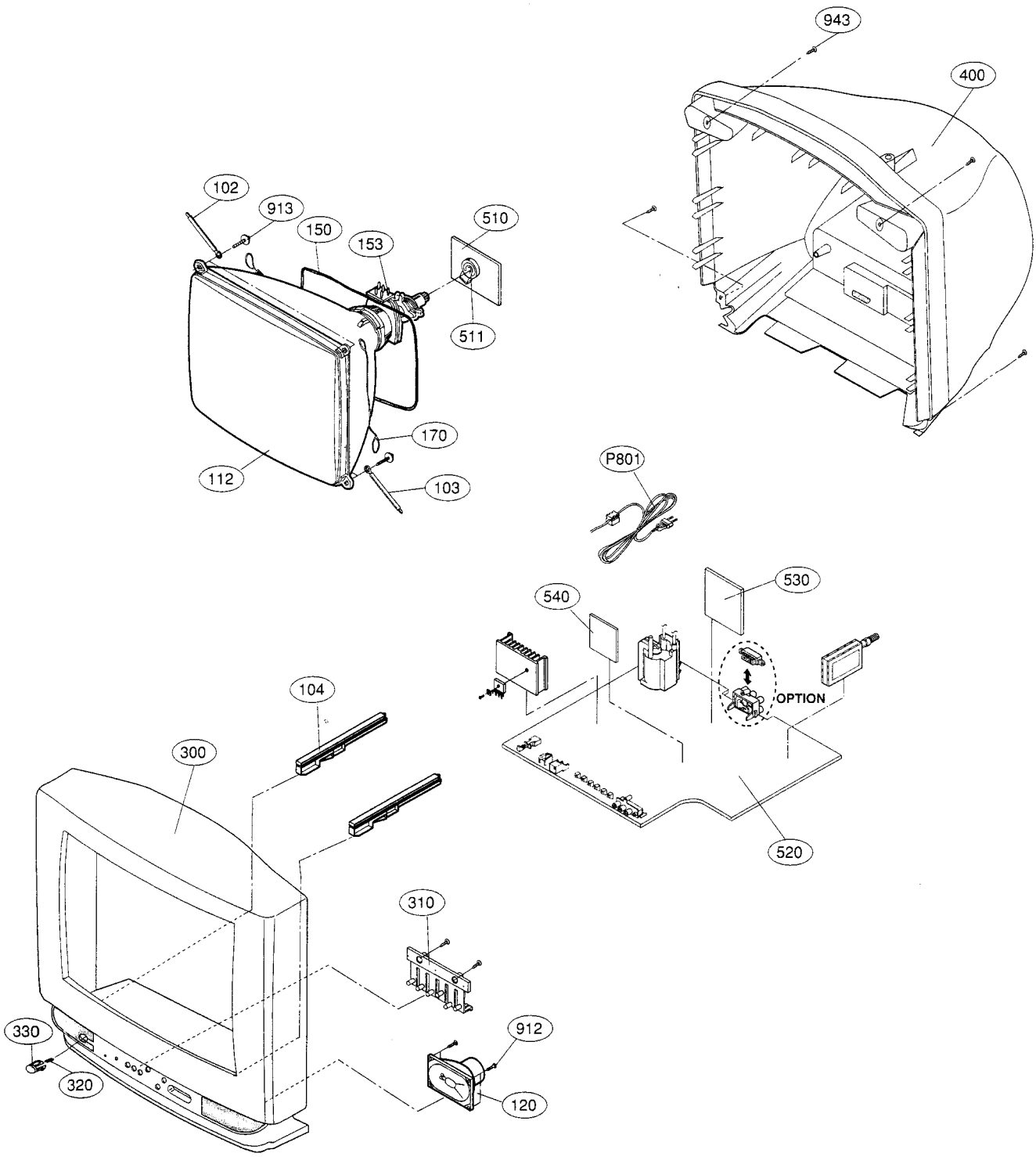

## NO SOUND / PICTURE OK



## NO PICTURE / NO SONUD


Is any OSD displayed?
No
Yes
OK
Check IC01 pin30,31,32 (R,G,B)
Check receiving system in MENU & excute Auto-program.
Not OK
Check IC01 pin9,10 (V-Sync, H-Sync) Check IC01 pin36,37 (XLC, EXLC) & IC01
Does the Auto-program operate properly.
Yes
Not OK
Store in manual-program MENU
Check 5V, 33V & IIC Bus Line
Not OK
Check 5V, 33V & IIC Bus Line of TUNER
OK
Check / Replace TUNER, IC501
Not OK
Is the CVBS signal OK. ( IC501 pin6 )
Go to NO SOUND / PICTURE OK
OK
Check CVBS singal Line & IC501
Not OK
Check R,G,B signal at IC501 pin19,20,21
OK
Check / Replace CPT Board component

# EXPLODED VIEW(CF-14/20/21F60/X)



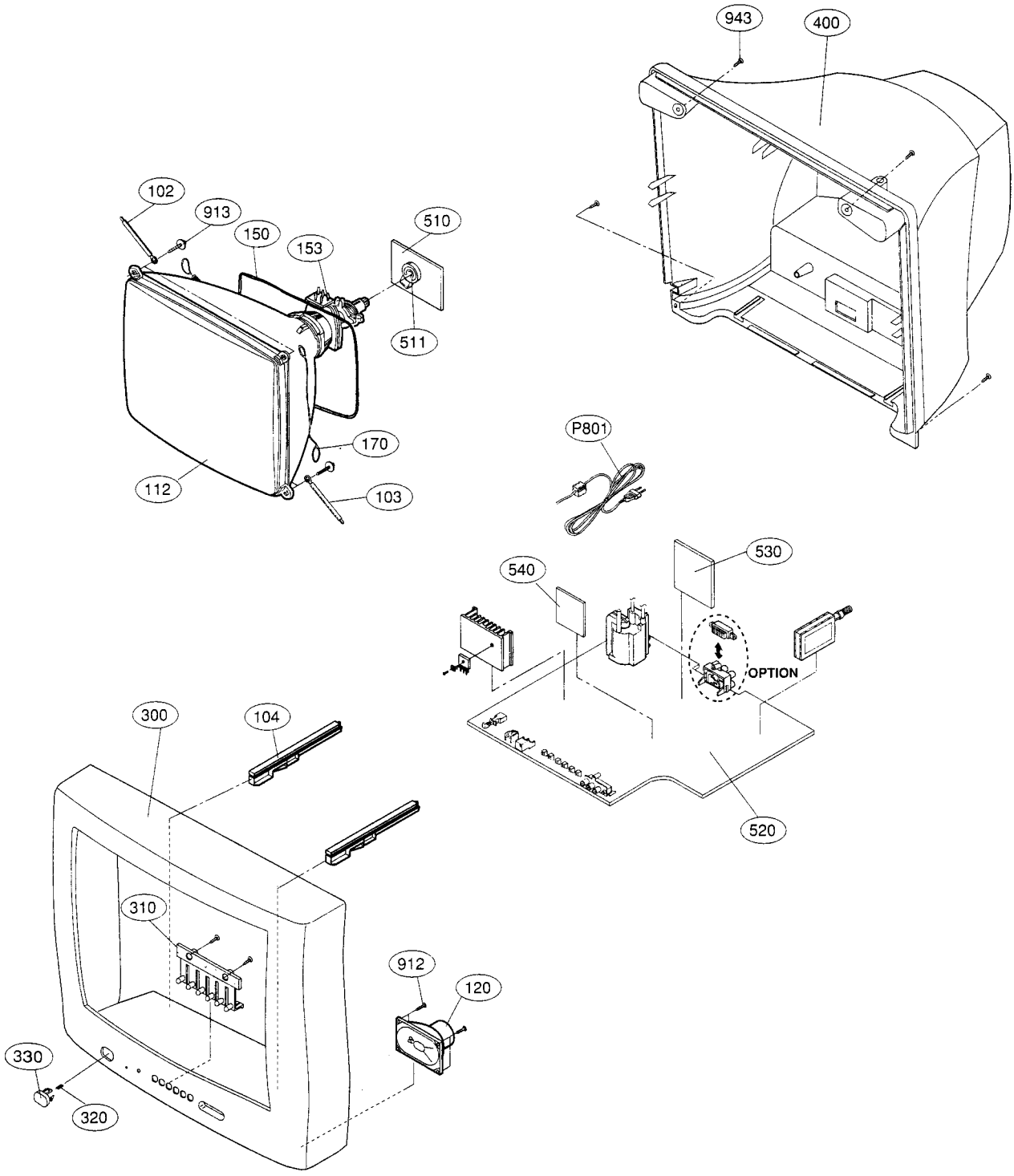
# EXPLODED VIEW PARTS LIST

The components identified by mark ⚠ is critical for safety.
Replace only with part number specified.

| NO | PART NO | DESCRIPTIONS |
|---|---|---|
| 102 | 341-721E | HOLDER,D-COIL(FOR SAFA,L=65) |
| | 341-721A | HOLDER,D-COIL(FOR AUTO,L=65)14" |
| 103 | 341-721F | HOLDER,D-COIL(FOR SAFA,L=130) |
| | 341-721B | HOLDER,D-COIL(FOR AUTO,L=130)14" |
| 104 | 343-B52A | SUPPORTER,PCB |
| ⚠ 112 | 6335V20002B | CPT ASSY A48JLL90X(ORION) |
| | 6335V14005B | CPT ASSY 37SX110Y22(EDI 14") *BROTHERS |
| | 2055-V1221H | CPT,A48QAD220X 03T7ND |
| | 2055-V1221C | CPT,A48QAD220X 03M7ND (+0.3G) |
| | 2055-V1221A | CPT,A48QAD220X 03L7ND (+0.5G)CIS |
| | 2055-V0674C | CPT,A51KPD12XX 14L7KR (+0.5G)CIS |
| | 2055-V0672Q | CPT,A51KPD12XX 14M7KR (+0.3G) |
| | 2055-V1221G | CPT,A48QAD220X 03R7ND (-0.1)H.POINT |
| | 112-C20S(*) | CPT SET A48ECR141X(S/S DARK W/ITC) |
| | 2055-00741V | CPT,A34KPU02XX 31N7ND LGEPL 14" |
| 120 | 120-C93G | SPEAKER,GENERAL C091P06K1459 8OHM 5/ |
| | 120-D04J | SPEAKER,C072P01K1458 8OHM 14" |
| ⚠ 150 | 150-D02M | COIL,DEGAUSSING,CU 20" 60T 15OHM |
| | 150-D02B | COIL,DEGAUSSING,CU 14" 42T 5.7OHM |
| | 150-D02T | COIL,DEGAUSSING 21" |
| ⚠ 153 | 153-276A | DY DCAMI-20PLAA |
| | 6150V-1002C | DY 0DY-M2007(ORION) |
| | 153-110F | DY DCANI-21FSAA |
| ⚠ 170 | 170-A01J | CPT EARTH (20,21") |
| | 170-A01L | CPT EARTH (14") |
| 300 | 3106V00055B | CABINET ASSY,20" LG |
| | 3106V00055F | CABINET ASSY,20" GS |
| | 3106V00054B | CABINET ASSY,21" LG |
| | 3106V00054E | CABINET ASSY,21" GS |
| | 3106V00067C | CABINET ASSY,14" LG |
| 310 | 5020V00181B | BUTTON,CONTROL 21" |
| | 5020V00181A | BUTTON,CONTROL 21" CIS |
| | 5020V00174B | BUTTON,CONTROL 20" |
| | 5020V00174A | BUTTON,CONTROL 20" CIS |
| | 5020V00204B | BUTTON,CONTROL 14" |
| 320 | 320-070U | SPRING,COIL(D4.8*L15) |
| | 320-062H | SPRING,COIL 14" |
| 330 | 5020V00182B | BUTTON,POWER 21" |
| | 5020V00182A | BUTTON,POWER 21" CIS |
| | 5020V00175B | BUTTON,POWER 20" |
| | 5020V00175A | BUTTON,POWER 20" CIS |
| | 5020V00205A | BUTTON,POWER 14" |
| 400 | 3809V00079B | BACK COVER ASSY |
| | 3809V00079G | BACK COVER ASSY SCART |
| | 3809V00095G | BACK COVER ASSY SCART(14") |
| | 3809V00095B | BACK COVER ASSY PHONO JACK(14") |
| ⚠ 511 | 6620VBC001A | SOCKET,CPT 29.1 PHI SINGLE |

| NO | PART NO | DESCRIPTIONS |
|---|---|---|
| 520 | 6871VMM206B | PWB ASSY,MAIN (84A) [01,05] 20" W.R.S, H.POINT |
| | 6871VMM254R | PWB ASSY,MAIN (84A) [01,01] 14"BROTHERS |
| | 6871VMM209P | PWB ASSY,MAIN (84A) [01,01] 21"BROTHERS |
| | 6871VMM209N | PWB ASSY,MAIN (84A) [01,01] 20"BROTHERS |
| | 6871VMM205R | PWB ASSY,MAIN (84A) [09,01] 21"ELECTRA |
| | 6871VMM205Q | PWB ASSY,MAIN (84A) [09,01] 20"ELECTRA |
| | 6871VMM205Y | PWB ASSY,MAIN 1(84A) [09,01] 20"LEBTRONIC |
| | 6871VMM158W | PCB ASSY,MAIN [01, 01] 20"CIS |
| | 6871VMM206A | PCB ASSY,MAIN [01, 01] 21"CIS |
| | 6871VMM219G | PCB ASSY,MAIN1 [01, 01] 20" CIS ORION |
| | 6871VMM229U | PWB ASSY,MAIN [01, 01] 20" CIS (W/TXT) |
| | 6871VMM229T | PWB ASSY,MAIN [01, 01] 21" CIS (W/TXT) |
| | 6871VMM278E | PWB ASSY,MAIN [09, 01] 20" LGEPL |
| | 6871VMM278F | PWB ASSY,MAIN [09, 01] 20" LGEPL(W/TXT) |
| | 6871VMM278H | PWB ASSY,MAIN [09, 01] 14" LGEPL |
| | 6871VMM278J | PWB ASSY,MAIN [09, 01] 14" LGEPL(W/TXT) |
| 540 | 6871VSM201B | PWB ASSY, TXT |
| | 6871VSM251F | PWB ASSY, TXT P/H |
| 912 | 1PWG0302816 | SCREW,TRUSS HEAD D3 L12 |
| 913 | 332-057B | SCREW ASSY,HEXAGON HEAD |
| 943 | 1PPF0403116 | SCREW,PAN HEAD D4 L16 |
| ⚠ P801 | 174-009E | CORD,POWER(W/HOLD,HOUSING,L=200,4.0 |
| | 6410VEH001C | CORD,POWER |

# EXPLODED VIEW(CF-14/20/21F80X)

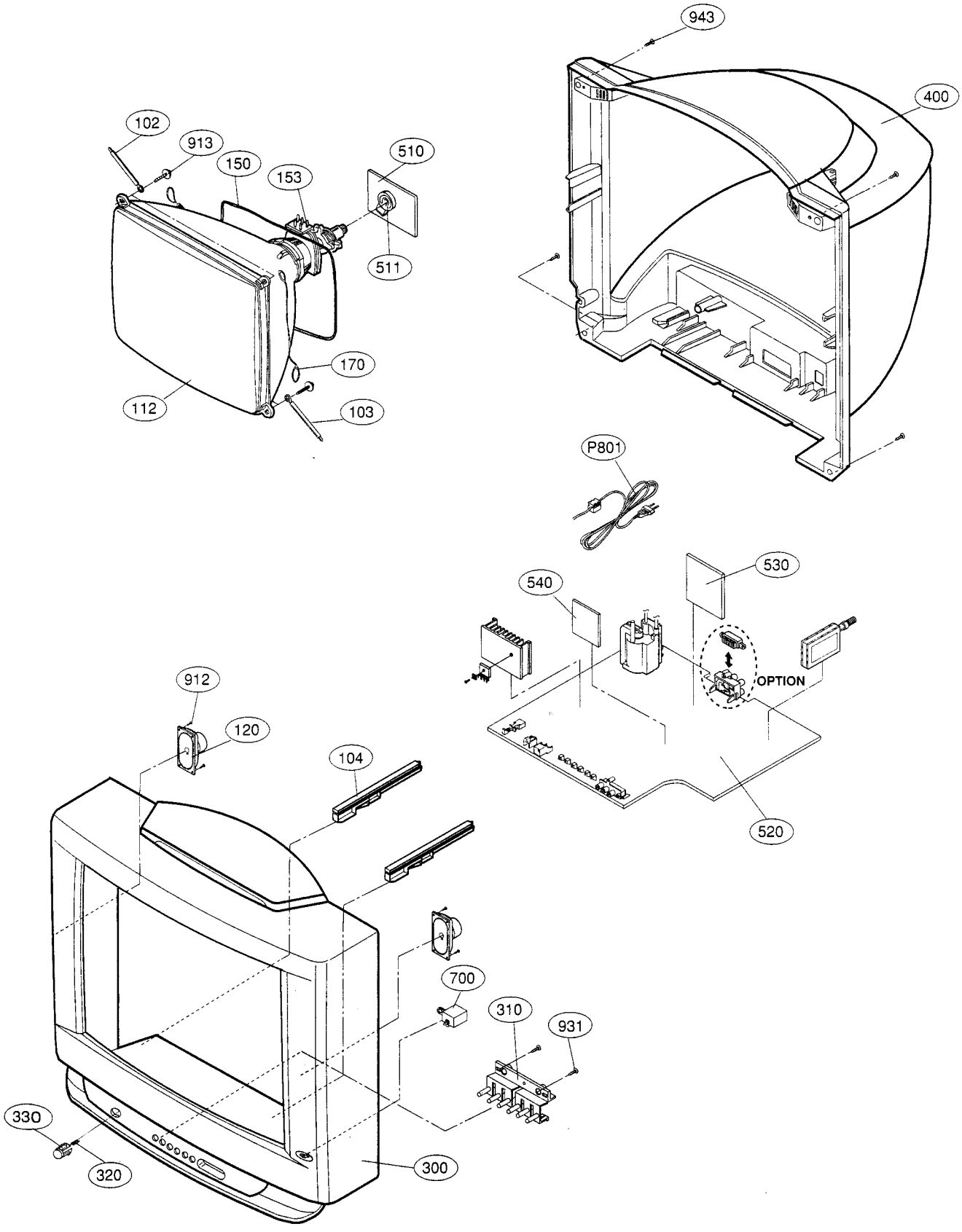


# EXPLODED VIEW PARTS LIST

The components identified by mark ⚠ is critical for safety.
Replace only with part number specified.

| LOCA. NO | PART NO | DESCRIPTIONS |
|---|---|---|
| 102 | 341-721E | HOLDER,D-COIL(FOR SAFA,L=65) |
| 103 | 341-721F | HOLDER,D-COIL(FOR SAFA,L=130) |
| 104 | 343-B52A | SUPPORTER,PCB |
| ⚠ 112 | 2055-V0674C | CPT A51KPD12XX 14L7KR |
| | 112-C21G | CPT A51EER131X29 21" MA-PL |
| | 2055-V1221C | CPT A48QAD220X 03M7ND(+0.3G) |
| | 2055-V1221G | CPT A48QAD220X 03R7ND(-0.1G) |
| | 2055-V1221A | CPT SET A48QAD220X 03L7ND(+0.5)*CIS |
| | 6335V20002B | CPT ASSY A48JLL90X (ORION)*CIS |
| | 2055-00746J | CPT A34KPU02XX AOL7ND(+0.5) 14" CIS |
| | 2055-01221B | CPT A48QAD220X 03N7ND 20" ROMANEL |
| 120 | 120-C93G | SPEAKER,GENERAL C091P06K1459 8OHM 5/ |
| | 120-D04C | SPEAKER C072P(80HM) 14" |
| ⚠ 150 | 150-D02B | COIL,DEGAUSSING ,CU 14" 42T 5.7OHM |
| | 150-D02T | COIL,DEGAUSSING ,AL 21" 56T 12 OHM |
| | 150-D02M | COIL,DEGAUSSING ,CU 20" 60T 15 OHM |
| ⚠ 153 | 153-110F | DY DCAN1*110F-21FSAA |
| | 6150V-1002C | DY 0DY-M2007(ORION) |
| | 153-276A | DY DCAM1*110F-20PLAA |
| ⚠ 170 | 170-851B | LEAD SET ASSY,CPT EARTH(L=640) |
| | 170-A01L | LEAD SET, CPT EARTH 14" 32T |
| 300 | 3106V00061C | CABINET UNIT,CF-21F80 LPLRR MULTI SYSTEM BK |
| | 3106V00050B | CABINET UNIT,CF-20F80 MPGRT GS |
| | 3106V00050G | CABINET UNIT,CF-20F80 LPLRR |
| | 3106V00050E | CABINET UNIT LG |
| | 3106V00056D | CABINET UNIT, CF-14F80 LPLRR |
| 310 | 5020V00171A | BUTTON,CONTROL,CF-21F80 |
| | 5020V00179B | BUTTON,CONTROL,CF-20F80 GRAY |
| | 5020V00179C | BUTTON,CONTROL,CF-20F80 BLACK |
| | 5020V00207A | BUTTON,CONTROL 14" |
| 320 | 320-062E | SPRING,KNOB |
| | 320-062J | SPRING,KNOB 14" |
| 330 | 5020V00170A | BUTTON,POWER,CF-21F80 |
| | 5020V00180B | BUTTON,POWER,CF-20F80 GRAY |
| | 5020V00180C | BUTTON,POWER,CF-20F80 BLACK |
| | 5020V00206A | BUTTON,POWER 14" |
| 400 | 3809V00089B | BACK COVER ASSY,CF-21F80 A/V IN-OUT |
| | 3809V00089K | BACK COVER ASSY(SCART),CF-21F80X |
| | 3809V00073C | BACK COVER ASSY,CF-20F80 SCART |
| | 3809V00073E | BACK COVER ASSY, PHONE JACK |
| | 3809V00081B | BACK COVER ASSY, CF-14F80 PHONE |
| 511 | 6620VBC001A | SOCKET,CPT 29.1 PHI SINGLE |
| 520 | 6871VMM206A | PWB ASSY,MAIN(84A) [01,01] 21" CF-21F80 CIS |
| | 6871VMM158W | PWB ASSY,MAIN(84A) [01,01] CF-20F80 CIS |
| | 6871VMM205H | PWB ASSY,MAIN(84A) [09,01] 20" CF-20F80 SBITANY |
| | 6871VMM206C | PWB ASSY,MAIN(84A) [01,01] 14" CIS |
| | 6871VMM206F | PWB ASSY,MAIN(84A) [01,01] 21" CIS AUTO |
| | 6871VMM209T | PWB ASSY,MAIN(84A) [01,05] 20" H.POINT |
| | 6871VMM219G | PWB ASSY,MAIN(84A) [01,01] 20" CIS ORION CPT |
| | 6871VMM229U | PWB ASSY,MAIN(84A) [01,01] CF-20F80X CIS |
| | 6871VMM229T | PWB ASSY,MAIN(84A) [01,01] CF-21F80X CIS |
| | 6871VMM236U | PWB ASSY,MAIN(84A) [09,01] 20" TELESTAR |
| | 6871VMM278G | PWB ASSY,MAIN(84A) [09,01] 21" MA-PL |
| | 6871VMM302V | PWB ASSY,MAIN(84A) [09,01] 20F80 ROMANEL |
| | 6871VMM302W | PWB ASSY,MAIN(84A) [09,01] 20F80X ROMANEL |
| 540 | 6871VSM201B | PWB ASSY,TXT |
| | 6871VSM201E | PWB ASSY,TXT P/H(EAST EU) |
| | 6871VSM251F | PWB ASSY,TXT MA-PL |
| 912 | 1PWG0302816 | SCREW,TRUSS HEAD D3 L12 |
| 913 | 332-057B | SCREW ASSY,HEXAGON HEAD |
| 943 | 1PPF0403116 | SCREW,PAN HEAD D4 L16 |
| ⚠ P801 | 174-009E | CORD,POWER(W/HOLD,HOUSING,L=200,4.0 |

# EXPLODED VIEW(CT/CF-14/20/21K50E/52E/X/54ET)



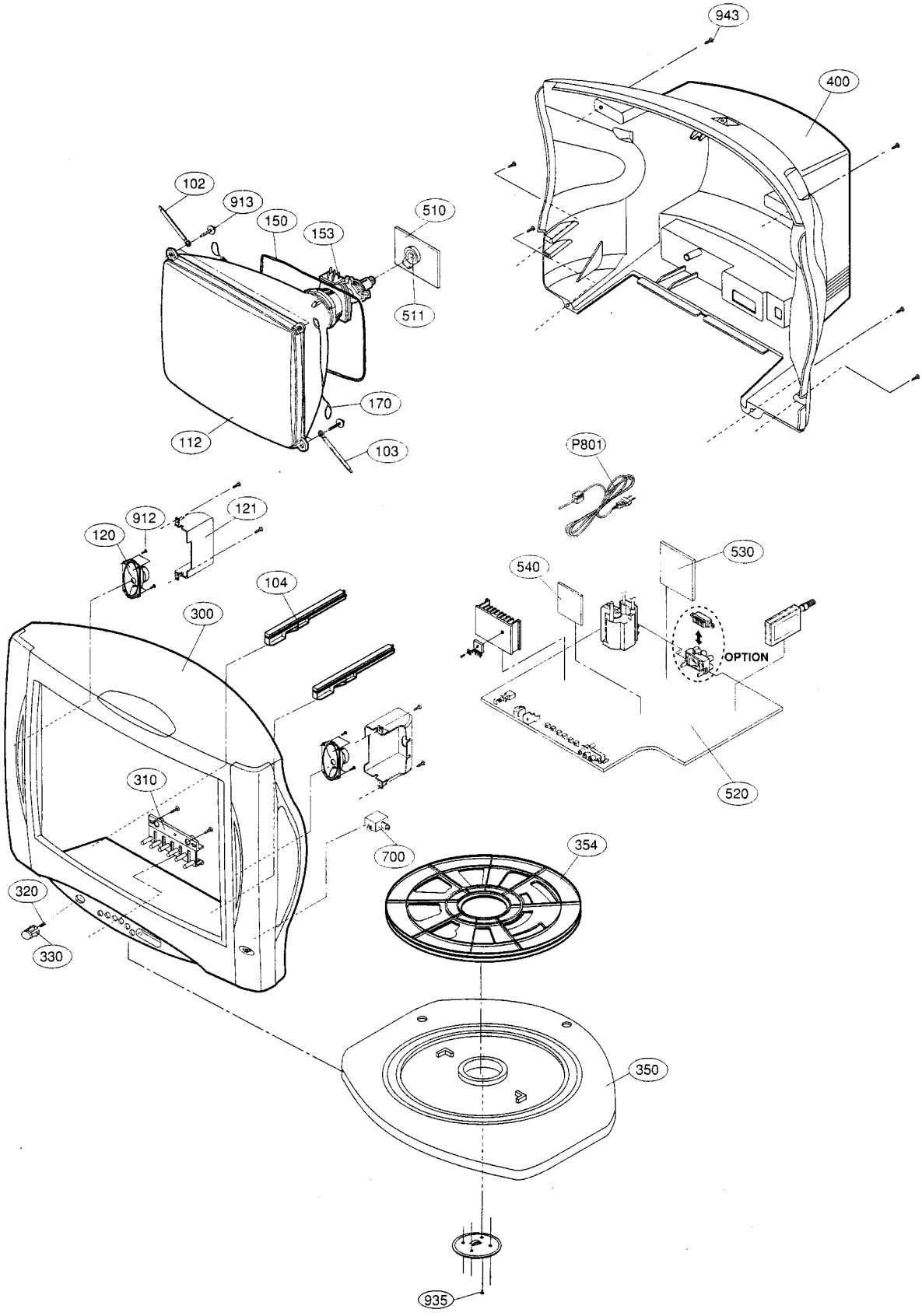
# EXPLODED VIEW PARTS LIST

The components identified by mark ⚠ is critical for safety.
Replace only with part number specified.

| NO | PART NO | DESCRIPTIONS |
|---|---|---|
| 102 | 341-721E | HOLDER,D-COIL(FOR SAFA L=65) |
| 103 | 341-721F | HOLDER,D-COIL(FOR SAFA,L=130) |
| 104 | 343-B52A | SUPPORTER,PCB |
| ⚠ 112 | 2055-V0672Q | CPT A51KPD12XX 14M7KR |
| | 2055-V0672N | CPT A51KPD12XX 14Q7KR *H.POINT |
| | 2055-V0672P | CPT A51KPD12XX 14K7KR(+0.2) *LGEGF 21" |
| | 2055-V0674C | CPT A51KPD12XX 014L7KR *CIS |
| | 2055-V1221A | CPT A48QAD220X 03L7ND(+0.5G) |
| | 2055-V1221C | CPT A48QAD220X 03M7ND(+0.3G) |
| | 2055-V1221D | CPT A48QAD220X 03K7ND(+0.2) *LGEGF 20" |
| | 2055-01221H | CPT A48QAD220X 03R7ND *DRAGON |
| | 2055-00742B | CPT A34KPU02XX 31T7ND |
| | 2055-00744K | CPT A34KPU02XX 00L7ND *LGEAK 14" |
| | 2055-V1221G | CPT A48QAD220X 03R7ND(-0.1G)KENYA |
| | 6335V20002B | CPT ASSY A48JLL90X (ORION)*CIS |
| | 6335V20001D | CPT ASSY A48JLL90X (ORION)*LGEGF-IR |
| | 112-C21G(*) | CPTSET A51EER131X29(S/S GERMANY) LGEPL 21" |
| 120 | 120-C77G | SPEAKER C122P02K14598OHM 10 21" |
| | 6400VF5001B | SPEAKER 16OHM 5/7W 20" |
| | 120-C93G | SPEAKER C091P06K1459 8OHM 14" |
| ⚠ 150 | 150-D02T | COIL,DEGAUSSING,AL 21" 56T 12 OHM |
| | 150-D02M | COIL,DEGAUSSING,CU 20" 60T 15 OHM |
| | 150-D02B | COIL,DEGAUSSING,CU 14" 42T 5.7OHM |
| ⚠ 153 | 153-110F | DYDCAN1*110F-21FSAA |
| | 153-276A | DYDCAM1*20PLAA |
| | 6150V-1002C | DYODY-M2007(ORION) |
| ⚠ 170 | 170-851C | LEAD SET,CPT EARTH 20,21"(L=640) |
| | 170-851A | LEAD SET,CPT EARTH 14"(L=460) |
| 300 | 3106V00048C | CABINET UNIT,CF-21K50E MPGRT GS |
| | 3106V00048G | CABINET UNIT,CF-21K52E MPGRT GS |
| | 3106V00048H | CABINET UNIT,CF-21K50E LPLRR |
| | 3106V00048M | CABINET UNIT,CF-21K50E MPLRB LG |
| | 3106V00049C | CABINET UNIT,CF-20K52E MPGRT GS |
| | 3106V00049D | CABINET UNIT,CF-20K50E LPLRR |
| | 3106V00049J | CABINET UNIT,CF-20K52E MPLRD LG |
| | 3106V00049K | CABINET UNIT,CF-20K50E MPGRT |
| | 3106V00063D | CABINET UNIT,KCF14K50E FPLRD2 |
| | 3106V00049M | CABINET UNIT,CF-20K50E H.POINT |
| | 3106V00076B | CABINET UNIT,KCF21K54ET LGEPL |
| 310 | 5020V00158A | BUTTON,CONTROL 20,21" |
| | 5020V00189B | BUTTON,CONTROL 14" |
| 320 | 320-062H | SPRING,COIL |
| 330 | 5020V00157C | BUTTON,POWER 20,21" |
| | 5020V00188B | BUTTON,POWER 14" |
| 400 | 3809V00069C | BACK COVER ASSY,SCART |
| | 3809V00069A | BACK COVER ASSY,A/V IN/OUT JACK |
| | 3809V00091C | BACK COVER ASSY,14" A/V IN/OUT JACK |
| | 3809V00069J | BACK COVER ASSY LGEPL |
| ⚠ 511 | 6620VBC001A | SOCKET,CPT 29.1 PHI SINGLE |

| NO | PART NO | DESCRIPTIONS |
|---|---|---|
| 520 | 6871VMM158L | PWB ASSY,MAIN(84A)[15,01] CF-21K50E SBITANY |
| | 6871VMM158R | PWB ASSY,MAIN(84A)[13,01] CF-21K52E SBITANY |
| | 6871VMM158Y | PWB ASSY,MAIN(84A)[07,01] CF-21K50E CIS |
| | 6871VMM199A | PWB ASSY,MAIN(84A)[05,01] CF-21K52E R. SHAHAB |
| | 6871VMM199B | PWB ASSY,MAIN(84A)[05,01] CF-21K52EX R. SHAHAB |
| | 6871VMM209D | PWB ASSY,MAIN(84A)[07,01] CF-21K50E PHONO BROTHERS |
| | 6871VMM158U | PWB ASSY,MAIN(84A)[13,01] CF-20K52E SCART SBITANY |
| | 6871VMM209H | PWB ASSY,MAIN(84A)[05,01] CF-20K52E PHONO SBITANY |
| | 6871VMM205K | PWB ASSY,MAIN(84A)[15,01] CF-20K50E SCART SBITANY |
| | 6871VMM158Z | PWB ASSY,MAIN(84A)[07,01] CF-20K50E CIS |
| | 6871VMM205M | PWB ASSY,MAIN(84A)[05,01] KCF14K50E DRAGON |
| | 6871VMM205P | PWB ASSY,MAIN(84A)[07,01] KCF20K50E DRAGON |
| | 6871VMM205T | PWB ASSY,MAIN(84A)[07,05] CF-21K50E E.B.G |
| | 6871VMM206T | PWB ASSY,MAIN(84A)[05,01] KCF14K50E LGEAK |
| | 6871VMM209C | PWB ASSY,MAIN(84A)[07,01] CF-20K50E BROTHERS |
| | 6871VMM209M | PWB ASSY,MAIN(84A)[07,05] CF-20K50E H.POINT |
| | 6871VMM219B | PWB ASSY,MAIN(84A)[05,01] CF-21K52EX LGEGF-IR |
| | 6871VMM219E | PWB ASSY,MAIN(84A)[05,01] CF-20K52EX LGEGF-IR |
| | 6871VMM219F | PWB ASSY,MAIN(84A)[07,01] 20" CIS ORION CPT |
| | 6871VMM219L | PWB ASSY,MAIN(84A)[05,01] CF-20K52EX LGEGF-IR (ORION CPT) |
| | 6871VMM236G | PWB ASSY,MAIN(84A)[05,01] CF-20K52ECIS |
| | 6871VMM268A | PWB ASSY,MAIN(84A)[23,01] CT-20K50E LGEGF 20" |
| | 6871VMM271A | PWB ASSY,MAIN(84A)[23,01] CT-21K50E LGEGF 21" |
| | 6871VMM278R | PWB ASSY,MAIN(84A)[13,01] LGEPL 21" |
| 530 | 6871VSM202A | PWB ASSY,SUB AV/ST(MC84A) |
| | 6871VSM286E | PWB ASSY,SUB RF/ST(MC84A) |
| 540 | 6871VSM201A | PWB ASSY, TXT |
| | 6871VSM251F | PWB ASSY, TXT P/H |
| 700 | 0IGL120104A | CDS SENSOR MODULE(P1201-04) |
| 912 | 1PTF0402816 | SCREW,TRUDD HEAD D4 L12 |
| 913 | 332-057B | SCREW ASSY,HEXAGON HEAD 20,21" |
| | 332-057A | SCREW ASSY,HEXAGON HEAD 14" |
| 931 | 1PWG0302816 | SCREW,TRUSS HEAD D3 L12 |
| 943 | 1PPF0403116 | SCREW,PAN HEAD D4 L16 |
| ⚠ P801 | 174-009E | CORD,POWER(W/HOLD,HOUSING,L=200,4.0 |

# EXPLODED VIEW(CT/CF-14/16/20/21S10E/X/12E)



# EXPLODED VIEW PARTS LIST

The components identified by mark ⚠ is critical for safety.
Replace only with part number specified.

| NO | PART NO | DESCRIPTIONS |
|---|---|---|
| 102 | 341-721E | HOLDER,D-COIL(FOR SAFA,L=65) |
| 103 | 341-721F | HOLDER,D-COIL(FOR SAFA,L=130) |
| 104 | 343-B52A | SUPPORTER,PCB |
| ⚠ 112 | 2055-V0674C | CPT A51KPD12XX 14L7KR *CIS 21" |
| | 2055-V0672M | CPT A51KPD12XX 14T7KR (-0.2G)*ROCHA-M 21" |
| | 2055-V0672N | CPT A51KPD12XX 14Q7KR *E.B.G |
| | 2055-V0672Q | CPT A51KPD12XX 14M7KR *RADELEC,BROTHERS 21", LGEGF-IR |
| | 2055-V1221A | CPT A48QAD220X 03L7ND *CIS 20" |
| | 2055-V1221B | CPT A48QAD220X 03N7ND *DG-CZC 20" |
| | 6341V21002B | BARE CPT ASSY A51QAE320X 14N7KR *DG-CZC 21" |
| | 2055-V1221C | CPT A48QAD220X 03M7ND *LGEGF-IR,BROTHERS 20" |
| | 2055-V1221D | CPT A48QAD220X 03K7ND (+0.2)*LGEGF 20" |
| | 2055-V1221G | CPT A48QAD220X 03R7ND(-0.1G) *LGEAL |
| | 2055-00742A | CPT A34KPU02XX 31R7ND 14" |
| | 2055-00672M | CPT A51KPD12XX 14T7KR21"W.R.S |
| | 2055-V0672P | CPT A51KPD12XX 14K7KR (+0.2)*LGEGF 21" |
| | 2055-V0672V | CPT A51KPD12XX 14R7KR 21"H.POINT |
| | 2055-V0744L | CPT A34KPU02XX 31T7ND (-0.2G)*ROCHA-M 14" |
| | 6335V21001A | CPTASSY A51JSW91X LGESV |
| | 6335V14005A | CPTASSY 37SX110Y22(EDI 14") *SBITANY |
| | 6335V20002B | CPTASSY A48JLLX (ORION) |
| | 112-C21G(*) | CPT SET A51EER131X29 LGEPL 21" |
| 120 | 120-D38F | SPEAKER,MID-RANGE C131P01-044K14 8 OHM |
| | 6400VA0001A | SPEAKER,8 OHM 5/12W 14" |
| 121 | 4810V00071A | BRACKET,COVER(SPK) |
| ⚠ 150 | 150-D02T | COIL,DEGAUSSING,AL 21" 56T 12 OHM |
| | 150-D02Y | COIL,DEGAUSSING,CU 20" 60T 15 OHM |
| | 150-D02A | COIL,DEGAUSSING,CU 14" 42T 5.7OHM |
| ⚠ 153 | 153-110F | DY DCAN1*110F-21FSAA |
| | 153-113V | DY DCAD2-14SNAB14" |
| | 153-276A | DY DCAM1-20PLAA |
| ⚠ 170 | 170-851C | LEAD SET ASSY,CPT EARTH(L=640) 20,21" |
| | 170-851A | LEAD SET ASSY,CPT EARTH(L=460) 14" |
| 300 | 3106V00057D | CABINET UNIT CF-21S10E, LG GOLDEN EYE |
| | 3106V00057B | CABINET UNIT CF-21S12E,BK, GOLDEN EYE |
| | 3106V00058F | CABINET UNIT CF-20S12E STEREO M/ST |
| | 3106V00058C | CABINET UNIT CF-20S10E,BK,GOLDEN |
| | 3106V00070B | CABINET UNIT 14S10E,LG,GOLDEN |
| | 3106V00057C | CABINET UNIT 21"W.R.S |
| | 3106V00057E | CABINET UNIT 21"H.POINT |
| | 3106V00058E | CABINET UNIT, CF-20S10EX LGEAL |
| 310 | 5020V00166A | BUTTON,CONTROL 21" |
| | 5020V00187A | BUTTON,CONTROL 20" |
| | 5020V00183A | BUTTON,CONTROL 14" |
| 320 | 320-070G | SPRING,COIL |
| | 320-062H | SPRING,COIL 20" |
| 330 | 5020V00165A | BUTTON,POWER 21" |
| | 5020V00186A | BUTTON,POWER 20" |
| | 5020V00184A | BUTTON,POWER 14" |
| 350 | 3750V00009C | RACK,BASE ASSY 20"/21" BK COLOR |
| | 3750V00009A | RACK,BASE ASSY |
| 354 | 4980V00035A | SUPPORTER,BASE(SWIVEL+C/A) |

| NO | PART NO | DESCRIPTIONS |
|---|---|---|
| 400 | 3809V00082D | BACK COVER ASSY A/V JACK |
| | 3809V00082A | BACK COVER ASSY SCART |
| | 3809V00097B | BACK COVER ASSY 14" A/V JACK |
| | 3809V00097E | BACK COVER ASSY 14" SCART |
| | 3809V00082B | BACK COVER ASSY 21" PHONO |
| | 3809V00082C | BACK COVER ASSY 21" PHONO |
| ⚠ 511 | 6620VBC001A | SOCKET,CPT 29.1 PHI SINGLE |
| 520 | 6871VMM158X | PWB ASSY,MAIN(84A)[07,01] 21" CIS CF-21S10EX |
| | 6871VMM158Y | PWB ASSY,MAIN(84A)[07,01] 21" CIS CF-21S10E |
| | 6871VMM205D | PWB ASSY,MAIN(84A)[13,01] 21" RADELEC |
| | 6871VMM206G | PWB ASSY,MAIN(84A)[07,01] 20" LGEAL |
| | 6871VMM209D | PWB ASSY,MAIN(84A)[07,01] 21" BROTHERS CF-21S10E |
| | 6871VMM254G | PWB ASSY,MAIN(84A)[01,01] 14" SBITANY |
| | 6871VMM254T | PWB ASSY,MAIN(84A)[01,01] 14" LGEGF-IR CF-14S10 |
| | 6871VMM339D | PWB ASSY,MAIN(84A)[01,01] 14" LGEGF-IR CF-14S10X |
| | 6871VMM209H | PWB ASSY,MAIN(84A)[05,01] 20" LGEGF-IRCF-20S12E |
| | 6871VMM209R | PWB ASSY,MAIN(84A)[05,01] CF-21S12E LGEGF-IR |
| | 6871VMM158U | PWB ASSY,MAIN(84A)[13,01] 20" SBITANY |
| | 6871VMM158Z | PWB ASSY,MAIN(84A)[07,01] 20" CISCF-20S10E |
| | 6871VMM209C | PWB ASSY,MAIN(84A)[07,01] 20" BROTHERS CF-20S10E |
| | 6871VMM158T | PWB ASSY,MAIN(84A)[05,05] 14"MCR |
| | 6871VMM158V | PWB ASSY,MAIN(84A)[07,05] 21"W.R.S |
| | 6871VMM158N | PWB ASSY,MAIN(84A)[07,05] 21"H.POINT |
| | 6871VMM219B | PWB ASSY,MAIN(84A)[05,01] CF-21S12EXLGEGF-IR |
| | 6871VMM219E | PWB ASSY,MAIN(84A)[05,01] CF-20S12EXLGEGF-IR |
| | 6871VMM219F | PWB ASSY,MAIN(84A)[07,01] CF-20S10EORION CPT |
| | 6871VMM229X | PWB ASSY,MAIN(84A)[13,01] 14" ROCHA-M |
| | 6871VMM272A | PWB ASSY,MAIN(84A)[13,01] 21" ROCHA-M |
| | 6871VMM199D | PWB ASSY,MAIN 1 [21,00] KCD 21S122 |
| | 6871VMM236G | PWB ASSY,MAIN(84A)[05,01] 20" CIS CF-20S12E |
| | 6871VMM236H | PWB ASSY,MAIN(84A)[05,01] 21" CIS CF-21S12E |
| | 6871VMM269A | PWB ASSY,MAIN(84A)[23,01] 20" LGEGF CT-20S10E |
| | 6871VMM270A | PWB ASSY,MAIN(84A)[23,01] 21" LGEGF CT-21S10E |
| | 6871VMM278K | PWB ASSY,MAIN(84A)[15,01] 21" LGEPL |
| 540 | 6871VSM201A | PWB ASSY,SUB(84A)TXT P/R ETC |
| | 6871VSM251A | PWB ASSY,SUB(84A)TXT P/H |
| | 6871VSM251P | PWB ASSY,SUB(84A)TXT PARSI |
| 700 | 0IGL120104A | CDS SENSOR |
| 912 | 1PTF0402816 | SCREW,TRUSS HEAD D4 L12 |
| 913 | 332-057B | SCREW ASSY,HEXAGON HEAD 20,21" |
| | 332-057A | SCREW ASSY,HEXAGON HEAD 14" |
| 943 | 1PPF0403116 | SCREW,PAN HEAD D4 L16 |
| 935 | 1PTF0402816 | SCREW,TRUSS HEAD D4 L12 |
| ⚠ P801 | 174-009E | CORD,POWER(W/HOLD,HOUSING,L=200,4.0 |
| | 174-224A | CORD,POWER |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

# REPLACEMENT PARTS LIST

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| | | **IC** |
| IC01 | 0ISO883806F | IC,LG8838-06F *LANG.ASIA 8 |
| " | 0ISO883807D | IC,LG8838-07D *LANG.RUSSIA |
| IC02 | 0IAL240410A | IC,AT24C04-10PC 8D EEPROM(4K) |
| " | 0IAL241600B | IC,AT24C16-10PC 8D EEPROM(16K) |
| IC03 | 0ISS754200A | IC,KA7542Z RESET TO92 TP 4.2V |
| IC201 | 0IHA405200A | IC,CD4052B 16P DIP DIFF-4-CH MUX |
| IC202 | 0IHA405200A | IC,CD4052B 16P DIP DIFF-4-CH MUX |
| IC301 | 0IPH835150A | IC,TDA8351/N5 9P,SIP BK V/OUT(W/O |
| IC501 | 0IPH884212A | IC,TDA8842 (S1)/N2 56SDIP BK |
| IC601 | 0ISA428200A | IC,LA4282 12S 2CHX10W AUDIO AMP |
| IC602 | 0ISG200600A | IC,TDA2006 5Z 1CHX10W AUDIO AMP |
| IC603 | 0IKE455800E | IC,KIA4558 DUAL OP AMP |
| IC801 | 0ISH123200B | IC,PC123 FY2PHOTO COUPLER |
| ⚠ IC802 | 0ITF435000A | IC,4N35(G)V 6D PHOTO COUPLER |
| IC803 | 0ISK665413A | IC,STR-F6654(LF1352) 5P,SIP BK ST |
| IC804 | 0ISK115000A | IC,SE115N(LF12) 3P 115V ERROR AMP |
| "(14") | 0ISK110000A | IC,SE110N(LF12) 3P 110V ERROR AMP |
| IC840 | 0ISS780500J | IC,KA78L05AZ TO-92 TP 5V REGULATO |
| IC841 | 0ISS780800H | IC,KA78R08 4P,TO-220F BK LOW DROP |
| IC901 | 0IPH610700A | IC,TDA6107Q SIP9 BK VIDEO OUT AMP |
| | | **DIODE** |
| DB801 | 0DD260000BB | DIODE,BRIDGE D2SBA60(STK) |
| D01 | 0DD414809ED | DIODE,DS4148 |
| D02 | 0DD414809ED | DIODE,DS4148 |
| D101 | 0DD414809ED | DIODE,DS4148 |
| D102 | 0DD859009AA | DIODE,MA859 |
| D302 | 0DD414809ED | DIODE,DS4148 |
| D401 | 0DD150009CA | DIODE,RGP15J |
| D501 | 0DD414809ED | DIODE,DS4148 |
| D502 | 0DD414809ED | DIODE,DS4148 |
| D503 | 0DD414809ED | DIODE,DS4148 |
| D504 | 0DD414809ED | DIODE,DS4148 |
| D505 | 0DD414809ED | DIODE,DS4148 |
| D506 | 0DD414809ED | DIODE,DS4148 |
| D507 | 0DD414809ED | DIODE,DS4148 |
| D508 | 0DD414809ED | DIODE,DS4148 |
| D509 | 0DD414809ED | DIODE,DS4148 |
| D601 | 0DD414809ED | DIODE,DS4148 |
| D602 | 0DD414809ED | DIODE,DS4148 |
| D631 | 0DD414809ED | DIODE,DS4148 |
| D741 | 0DR149379AA | DIODE,1N4937G |
| D742 | 0DD150009CA | DIODE,RGP15J |
| D743 | 0DR149379AA | DIODE,1N4937G |
| D802 | 0DD100009AM | DIODE,EU1ZV |
| D803 | 0DD414809ED | DIODE,DS4148 |
| D804 | 0DD120000BB | DIODE,FML-G12S *AV STEREO |
| " | 0DD360009AA | DIODE,BYW36(2A/600V) *MONO |
| D805 | 0DD200009AC | DIODE,RG-2 V |
| D806 | 0DD100009AM | DIODE,EU1ZV |
| D807 | 0DD300009AC | DIODE,RU3AMV |
| D808 | 0DD200009AF | DIODE,RU-2MV |
| D901 | 0DD400309AD | DIODE,IN4003A RECT |
| LD01 | 0DD000000BA | DIODE,LAMP(DIFFUSION TYPE) |
| ZD101 | 0DZ510009AB | DIODE,ZENER MTZ5.1B |
| ZD102 | 0DZ330009BA | DIODE,ZENER HZT33 |
| ZD201 | 0DZ510009AB | DIODE,ZENER MTZ5.1B |

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| ZD501 | 0DZ180009AA | DIODE,ZENER MTZ18B |
| ZD651 | 0DZ120009AA | DIODE,ZENER Z12BM TA |
| ZD681 | 0DZ120009AA | DIODE,ZENER Z12BM TA |
| ZD741 | 0DZ820009AA | DIODE,ZENER MTZ8.2B |
| ZD742 | 0DZ820009AA | DIODE,ZENER MTZ8.2B |
| ZD90 | 0DZ910009BA | DIODE,ZENER MTZ9.1B |
| ZD901 | 0DZ750009AA | DIODE,ZENER MTZ7.5B |
| ZD902 | 0DZ750009AA | DIODE,ZENER MTZ7.5B |
| ZD903 | 0DZ750009AA | DIODE,ZENER MTZ7.5B |
| ZD904 | 0DZ750009AA | DIODE,ZENER MTZ7.5B |
| | | **TRANSISTOR** |
| Q01 | 0TR945009AA | TR,KSC945C-Y |
| Q02 | 0TR120209AD | TR,KSR1202 |
| Q102 | 0TR319709AB | TR,KTC3197,TP(KTC388A),KEC |
| Q103 | 0TR945009AA | TR,KSC945C-Y |
| Q201 | 0TR945009AA | TR,KSC945C-Y |
| Q501 | 0TR733009AA | TR,KSA733C-Y |
| Q502 | 0TR945009AA | TR,KSC945C-Y |
| Q503 | 0TR733009AA | TR,KSA733C-Y |
| Q504 | 0TR945009AA | TR,KSC945C-Y |
| Q505 | 0TR733009AA | TR,KSA733C-Y |
| Q506 | 0TR733009AA | TR,KSA733C-Y |
| Q510 | 0TR733009AA | TR,KSA733C-Y |
| Q511 | 0TR733009AA | TR,KSA733C-Y |
| Q512 | 0TR945009AA | TR,KSC945C-Y |
| Q514 | 0TR120209AD | TR,KSR1202 |
| Q516 | 0TR945009AA | TR,KSC945C-Y |
| Q601 | 0TR733009AA | TR,KSA733C-Y |
| Q602 | 0TR319809AA | TR,KTC3198-TP-Y (KTC1815)KEC |
| Q651 | 0TR945009AA | TR,KSC945C-Y |
| Q652 | 0TR945009AA | TR,KSC945C-Y |
| Q653 | 0TR945009AA | TR,KSC945C-Y |
| Q654 | 0TR945009AA | TR,KSC945C-Y |
| Q680 | 0TR120209AD | TR,KSR1202 |
| Q741 | 0TR525000AA | TR,2SC5250 TO-3PFM HITACHI |
| Q742 | 0TR233109AA | TR,KSC2331-Y TP SAMSUNG TO-92L |
| Q801 | 0TR120209AD | TR,KSR1202 |
| Q802 | 0TR120209AD | TR,KSR1202 |
| | | **CAPACITOR** |
| C02 | 0CE475DK618 | C,ELECTROLYTIC 4.7UF STD 50V M |
| C03 | 0CN1010K519 | C,TUBULA(HIGH DIELE) 100PF 50V K |
| C06 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C07 | 0CN1010K519 | C,TUBULA(HIGH DIELE) 100PF 50V K |
| C08 | 0CN1010K519 | C,TUBULA(HIGH DIELE) 100PF 50V K |
| C09 | 0CN1010K519 | C,TUBULA(HIGH DIELE) 100PF 50V K |
| C10 | 181-007E | CAPACITOR MPE 50V 0.18UF J(TR) |
| C102 | 0CE335DK618 | C,ELECTROLYTIC 3.3UF STD 50V M |
| C103 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C104 | 0CE226DH618 | C,ELECTROLYTIC 22UF STD 25V M |
| C105 | 0CE475DK618 | C,ELECTROLYTIC 4.7UF STD 50V M |
| C106 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C107 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C108 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C109 | 0CN1010K519 | C,TUBULA(HIGH DIELE) 100PF 50V K |
| C11 | 0CE106DF618 | C,ELECTROLYTIC 10UF STD 16V M |
| C110 | 0CE226DH618 | C,ELECTROLYTIC 22UF STD 25V M |
| C111 | 0CN1020K519 | C,TUBULA(HIGH DIELE) 1000P 50V K |

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| C112 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 10000P 16V M |
| C113 | 0CX3300K409 | C,TUBULA(T.C) 33PF 50V J |
| C114 | 0CX3300K409 | C,TUBULA(T.C) 33PF 50V J |
| C12 | 0CE335DK618 | C,ELECTROLYTIC 3.3UF STD 50V M |
| C13 | 0CN1020K519 | C,TUBULA(HIGH DIELE) 1000PF 50V K |
| C18 | 0CX1000K409 | C,TUBULA(T.C) 10P 50V J |
| C19 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C20 | 0CE107DD618 | C,ELECTROLYTIC 100UF STD 10V M |
| C21 | 0CX1000K409 | C,TUBULA(T.C) 10P 50V J |
| C201 | 0CE106DK618 | C,ELECTROLYTIC 10UF STD 50V M |
| C202 | 0CE105DK618 | C,ELECTROLYTIC 1UF STD 50V M |
| C203 | 0CE105DK618 | C,ELECTROLYTIC 1UF STD 50V M |
| C205 | 0CE476DF618 | C,ELECTROLYTIC 47UF STD 16V M |
| C206 | 181-064P | CAPACITOR CE BP 16V 10 |
| C231 | 0CE226DH618 | C,ELECTROLYTIC 22UF STD 25V M |
| C232 | 0CE226DH618 | C,ELECTROLYTIC 22UF STD 25V M |
| C233 | 0CE227DF618 | C,ELECTROLYTIC 220UF STD 16V M |
| C301 | 0CN1010K519 | C,TUBULA(HIGH DIELE) 100PF 50V K |
| C302 | 0CN1020K519 | C,TUBULA(HIGH DIELE) 1000P 50V K |
| C303 | 0CE226DK618 | C,ELECTROLYTIC 22UF STD 50V M |
| C304 | 0CE227DH618 | C,ELECTROLYTIC 220UF STD 25V M |
| C305 | 0CK3320W515 | C,CERAMIC(HIGH DIELE) 3300P 500V K |
| C306 | 0CK4710W515 | C,CERAMIC(HIGH DIELE) 470PF 500V K |
| C307 | 0CQ1531N509 | C,POLYESTER(MYLAR) 0.015MF 100V K |
| C308 | 0CE225DK618 | C,ELECTROLYTIC 2.2UF STD 50V M |
| C309 | 0CQ1031N509 | C,POLYESTER(MYLAR) 0.01U 100V K |
| C310 | 0CN1020K519 | C,TUBULA(HIGH DIELE) 1000PF 50V K |
| C311 | 0CN1020K519 | C,TUBULA(HIGH DIELE) 1000PF 50V K |
| C401 | 181-013B | CAPACITOR MPP 200V 0.36uF J |
| " | 181-013G | CAPACITOR MPP 200V 0.5uF J*ORION CPT |
| "(20") | 181-013C | CAPACITOR MPP 200V 0.39uF J |
| "(14") | 181-013C | CAPACITOR MPP 200V 0.39uF J |
| C402 | 0CE475DP618 | C,ELECTROLYTIC 4.7UF STD 160V M |
| C403 | 181-015F | C,MPP 1600V 0.0073UF H |
| "(20") | 181-015P | C,MPP 1600V 0.0075UF H |
| "(14") | 181-015E | C,MPP 1600V 0.0068UF H |
| C404 | 0CK8210K515 | C,CERAMIC(HIGH DIELE) 820P 50V K |
| C502 | 0CE225DK618 | C,ELECTROLYTIC 2.2UF STD 50V M |
| C504 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| C506 | 181-007C | C,MPE 50V 0.1UF J |
| C507 | 0CE105DK618 | C,ELECTROLYTIC 1UF STD 50V M |
| C508 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| C509 | 0CN1040K949 | C,TUBULA(HIGH DIELE) 0.1M 50V Z |
| C510 | 0CE107DF618 | C,ELECTROLYTIC 100UF STD 16V M |
| C511 | 181-007H | CAPACITOR MPE 50V 0.47UF J |
| C512 | 0CE2251K636 | C,ELECTROLYTIC 2.2UF SM 50V M |
| C513 | 181-007F | C,MPE 50V 0.22UF J |
| C514 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| C515 | 0CQ1831N509 | C,POLYESTER(MYLAR) 0.018U 100V K |
| C516 | 0CQ2231N509 | C,POLYESTER(MYLAR) 0.022MF 100V K |
| C517 | 0CQ2231N509 | C,POLYESTER(MYLAR) 0.022MF 100V K |
| C518 | 0CQ2231N509 | C,POLYESTER(MYLAR) 0.022MF 100V K |
| C521 | 0CC2210K415 | C,CERAMIC(TEMP COMP) 220P 50V J NPO TP |
| C522 | 0CC2710K415 | C,CERAMIC(TEMP COMP) 270P 50V J |
| " | 0CC1800K415 | C,CERAMIC(TEMP COMP) 18P 50V J *CT-PAL |
| C523 | 0CC6200K415 | C,CERAMIC 62PF 50V J |
| " | 0CQ1021N509 | C,POLYESTER 0.001U 100V K*CT-PAL |
| C524 | 0CQ4731N509 | C,POLYESTER(MYLAR) 0.047U 100V K |

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| " | 181-442Z | C,POLYESTER(MYLAR) 0.1U 50V K*CT-PAL |
| C525 | 0CN1040K949 | C,TUBULA(HIGH DIELE) 0.1M 50V Z |
| C526 | 0CE107DF618 | C,ELECTROLYTIC 100UF STD 16V M |
| C527 | 0CE106DF618 | C,ELECTROLYTIC 10UF STD 16V M |
| C528 | 0CN1010K519 | C,TUBULA(HIGH DIELE) 100PF 50V K |
| C531 | 0CE104DK618 | C,ELECTROLYTIC 0.1UF STD 50V M |
| C532 | 0CQ2721N409 | C,POLYESTER(MYLAR) 2700PF 100V J |
| C533 | 0CE105DK618 | C,ELECTROLYTIC 1UF STD 50V M |
| C534 | 0CQ4721N509 | C,POLYESTER(MYLAR) 0.0047U 100V K |
| C535 | 0CN1020K519 | C,TUBULA(HIGH DIELE) 1000PF 50V K |
| C536 | 0CN1020K519 | C,TUBULA(HIGH DIELE) 1000PF 50V K |
| C537 | 0CN1020K519 | C,TUBULA(HIGH DIELE) 1000PF 50V K |
| C538 | 0CQ1041N455 | C,POLYESTER(MYLAR) 0.1000UF 100V J |
| C539 | 181-007F | C,MPE 50V 0.22UF J |
| C540 | 0CSZVTA001C | C,TANTALUM |
| C541 | 0CQ2231N509 | C,POLYESTER(MYLAR) 0.022MF 100V K |
| C542 | 0CQ3321N509 | C,POLYESTER(MYLAR) 0.0033U 100V K *AV STEREO |
| " | 0CQ3921N409 | C,POLYESTER(MYLAR) 0.0039U 100V J *MONO |
| C543 | 0CE106DF618 | C,ELECTROLYTIC 10UF STD 16V M |
| C544 | 181-007H | CAPACITOR MPE 50V 0.47UF J(TR) |
| C545 | 0CE105DK618 | C,ELECTROLYTIC 1UF STD 50V M |
| C548 | 0CE105DK618 | C,ELECTROLYTIC 1UF STD 50V M |
| C550 | 0CN8200K519 | C,TUBULA(HIGH DIELE) 82P 50V K B |
| C551 | 0CN8200K519 | C,TUBULA(HIGH DIELE) 82P 50V K B |
| C552 | 0CN8200K519 | C,TUBULA(HIGH DIELE) 82P 50V K B |
| C553 | 0CE335DK618 | C,ELECTROLYTIC 3.3UF STD 50V M |
| C601 | 0CQ1031N509 | C,POLYESTER(MYLAR) 0.01U 100V K |
| " | 0CQ6821N509 | C,POLYESTER(MYLAR) 0.0068U 100V K *RF.ST |
| C602 | 0CE684DK618 | C,ELECTROLYTIC 0.68UF STD 50V M |
| C603 | 0CE107DH618 | C,ELECTROLYTIC 100UF STD 25V M |
| C604 | 0CQ1031N509 | C,POLYESTER(MYLAR) 0.01U 100V K |
| " | 0CQ6821N509 | C,POLYESTER(MYLAR) 0.0068U 100V K *RF.ST |
| C605 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| C606 | 0CE107DH618 | C,ELECTROLYTIC 100UF STD 25V M |
| C607 | 0CE106DH618 | C,ELECTROLYTIC 10UF STD 25V M |
| C608 | 0CQ1041N509 | C,POLYESTER(MYLAR) 0.1MF 100V L |
| C609 | 0CE477DK618 | C,ELECTROLYTIC 470UF STD 50V M *AV STEREO |
| " | 0CE227DJ618 | C,ELECTROLYTIC 220UF STD 35V M *MONO |
| C610 | 0CE107DH618 | C,ELECTROLYTIC 100UF STD 25V M |
| C611 | 0CE684DK618 | C,ELECTROLYTIC 0.68UF STD 50V M |
| C612 | 0CE477DJ618 | C,ELECTROLYTIC 470UF STD 35V M |
| C613 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C614 | 0CE477DJ618 | C,ELECTROLYTIC 470UF STD 35V M |
| C615 | 0CE477DH618 | C,ELECTROLYTIC 470UF STD 25V M |
| C630 | 0CQ1031N509 | C,POLYESTER(MYLAR) 0.01U 100V K |
| C631 | 0CE225DK618 | C,ELECTROLYTIC 2.2UF STD 50V M |
| C632 | 0CE336DK618 | C,ELECTROLYTIC 33UF STD 50V M |
| C633 | 0CE225DK618 | C,ELECTROLYTIC 2.2UF STD 50V M |
| C634 | 0CE107DD618 | C,ELECTROLYTIC 100UF STD 10V M |
| C651 | 0CE106DF618 | C,ELECTROLYTIC 10UF STD 16V M |
| C652 | 0CX4700K409 | C,TUBULA(T.C) 47PF 50V J |
| C653 | 0CX4700K409 | C,TUBULA(T.C) 47PF 50V J |
| C657 | 0CX4700K409 | C,TUBULA(T.C) 47PF 50V J |
| C658 | 0CN1510K519 | C,TUBULA 150P 50V K |
| C659 | 0CN1040K949 | C,TUBULA(HIGH DIELE) 0.1M 50V Z |
| C661 | 0CE476DF618 | C,ELECTROLYTIC 47UF STD 16V M |
| C662 | 0CN1010K519 | C,TUBULA 100P 50V K |
| C680 | 0CQ6831N509 | C,POLYESTER(MYLAR) 0.068MF 100V K |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| C681 | 0CE334DK618 | C,ELECTROLYTIC 0.33UF STD 50V M |
| C682 | 0CE476DD618 | C,ELECTROLYTIC 47UF STD 10V M |
| C683 | 0CE106DF618 | C,ELECTROLYTIC 10UF STD 16V M |
| C685 | 0CE107DF618 | C,ELECTROLYTIC 100UF STD 16V M |
| C686 | 0CN1040K949 | C,TUBULA 0.1UF 50V Z |
| C688 | 0CE476DF618 | C,AL.ELECTROLYTIC 47UF STD 16V M |
| C741 | 0CQ1531N509 | C,POLYESTER(MYLAR) 0.015MF 100V K |
| C743 | 0CK4710W515 | C,CERAMIC(HIGH DIELE) 470PF 500V K |
| C744 | 0CE475DR618 | C,ELECTROLYTIC 4.7UF STD 250V M |
| C745 | 0CK4710W515 | C,CERAMIC(HIGH DIELE) 470PF 500V K |
| C746 | 0CE337DH618 | C,ELECTROLYTIC 330UF STD 25V M |
| C747 | 0CK4710W515 | C,CERAMIC(HIGH DIELE) 470PF 500V K |
| C748 | 0CE107DN618 | C,ELECTROLYTIC 100UF STD 100V M |
| C749 | 181-009V | C,PP 200V 0.047UF K |
| C751 | 0CQ1031N509 | C,POLYESTER(MYLAR) 0.01U 100V K |
| C752 | 0CE107DH618 | C,ELECTROLYTIC 100UF STD 25V M |
| C753 | 0CE474DK618 | C,ELECTROLYTIC 0.47UF STD 50V M |
| C80 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C801 | 0CE107BJ618 | C,ELECTROLYTIC 100UF KME 35V M |
| C802 | 181-091U | CAPACITOR 2KV R 221K |
| C803 | 181-091Q | CAPACITOR 1KV R 471K TP5 |
| C804 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| C805 | 0CE227DF618 | C,ELECTROLYTIC 220UF STD 16V M |
| ⚠ C806 | 181-001V | C,AL.ELECTROLYTIC CE 450V 220UF M *AV STEREO |
| " | 0CEZVBK002A | C,AL.ELECTROLYTIC 150UF 450V M *MONO |
| C807 | 0CK10201515 | C,CERAMIC(HIGH DIELE) 1000P 1KV K |
| C808 | 181-091R | CAPACITOR 1KV R 102K TP5 |
| ⚠ C809 | 0CQZVBK002C | C,POLYESTER A.C 275V 0.22UF K |
| C81 | 0CE476DF618 | C,ELECTROLYTIC 47UF STD 16V M |
| ⚠ C810 | 0CQZVBK002D | C,POLYESTER AC275V 0.47UF K *X-RAY |
| " | 0CQZVBK002C | C,POLYESTER AC275V 0.22UF K *NORMAL |
| ⚠ C811 | 181-120N | CAPACITOR ACT 4KV E 102M *AV STEREO |
| " | 181-120K | CAPACITOR ACT 4KV E 222M *MONO |
| ⚠ C812 | 181-120N | CAPACITOR ACT 4KV E 102M |
| C813 | 0CK4710W515 | C,CERAMIC(HIGH DIELE) 470PF 500V K |
| C814 | 0CE108DK61A | C,ELECTROLYTIC 1000UF STD 50V M |
| C815 | 181-091Q | CAPACITOR 1KV R 471K TP5 |
| C816 | 0CE228BF618 | C,ELECTROLYTIC 2200UF KME 16V M |
| C817 | 181-091Q | CAPACITOR 1KV R 471K TP5 |
| C818 | 0CE107DH618 | C,ELECTROLYTIC 100UF STD 25V M |
| C819 | 181-091R | CAPACITOR 1KV R 102K TP5 |
| C820 | 0CE227DP650 | C,ELECTROLYTIC 220UF STD 160V M |
| C821 | 0CE1071P650 | C,ELECTROLYTIC 100UF SM 160V M |
| C822 | 0CE107DD618 | C,ELECTROLYTIC 100UF STD 10V M |
| C823 | 0CK4710K515 | C,CERAMIC(HIGH DIELE) 470P 50V K |
| C824 | 0CE477DJ618 | C,ELECTROLYTIC 470UF STD 35V M |
| C825 | 181-091P | CAPACITOR 1KV SL 271J |
| C826 | 181-091N | CAPACITOR 1KV SL 101J |
| C829 | 181-011B | CAPACITOR PP 1600V 0.001UF J |
| C830 | 0CE475DK618 | C,ELECTROLYTIC 4.7UF STD 50V M |
| C90 | 0CN1040K949 | C,TUBULA(HIGH DIELE) 0.1M 50V Z |
| C904 | 0CQZVBK002A | C,POLYESTER A.C 275V 0.1UF M |
| C905 | 0CE106DR618 | C,ELECTROLYTIC 10UF STD 250V M |
| C906 | 0CE475DR618 | C,ELECTROLYTIC 4.7UF STD 250V M |
| C907 | 181-033S | CAPACITOR 2KV B 122K TP7.5 |
| J123 | 0CN1510K519 | C,TUBULA 150P 50V K |

## FERRITE CORE

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| FB741 | 125-022K | CORE,FERRITE 1UH |
| FB801 | 125-022K | CORE,FERRITE 1UH |
| FB802 | 125-022K | CORE,FERRITE 1UH |
| FB803 | 125-123A | CORE,FERRITE BFD3565R2F |
| FB804 | 125-022K | CORE,FERRITE 1UH |

## COIL & TRANSFORMER

| | | |
|---|---|---|
| J72 | 0LA0102K119 | INDUCTOR,10UH K |
| L02 | 0LA0102K119 | INDUCTOR,10UH K |
| L03 | 0LA0102K119 | INDUCTOR,10UH K |
| L101 | 0LA0101K119 | INDUCTOR,1.0UH K |
| L231 | 0LA0101K119 | INDUCTOR,1UH K |
| L301 | 0LA0102K139 | INDUCTOR,10UH K |
| L302 | 0LA0102K139 | INDUCTOR,10UH K |
| L401 | 150-L02C | COIL,H-LINEARITY 170UH |
| " | 150-L02Y | COIL,H-LINEARITY 70UH*ORION CPT |
| "(14") | 150-L01W | COIL,H-LINEARITY 57UH |
| L503 | 0LA0681K119 | INDUCTOR,6.8UH K |
| L504 | 0LA0561K119 | INDUCTOR,5.6UH K |
| L507 | 0LA1000K119 | INDUCTOR,100UH K |
| L508 | 0LA1000K119 | INDUCTOR,100UH K |
| L510 | 0LA0102K119 | INDUCTOR,10UH K |
| L521 | 0LA0561K119 | INDUCTOR,5.6UH K |
| L522 | 0LA0561K119 | INDUCTOR,5.6UH K |
| L523 | 0LA0561K119 | INDUCTOR,5.6UH K |
| L651 | 0LA0272K119 | INDUCTOR,27UH K |
| L652 | 0LA0122K119 | INDUCTOR,12UH K |
| L802 | 150-C02F | COIL,CHOKE 82UH R1217 |
| L901 | 150-C02A | COIL,CHOKE 10UH R0814 |
| R45 | 0LA0102K119 | INDUCTOR,10UH K |
| R47 | 0LA0102K119 | INDUCTOR,10UH K |
| R49 | 0LA0102K119 | INDUCTOR,10UH K |
| ⚠ T401 | 6170VC0003A | TRANSFORMER,HORIZONTAL |
| T801 | 150-F06H | COIL, LINE FILTER SQE2930 |
| T802 | 151-A13G | TRANSFORMER,SMPS EER-4215. |
| "(14") | 151-B06V | TRANSFORMER,SMPS EER-4215. |

## RESISTOR

| | | |
|---|---|---|
| AR01 | 180-E01K | R,ARRAY 4700 OHM 5% 1.778P 4.7K*8 1/8W |
| AR02 | 180-E01K | R,ARRAY 4700 OHM 5% 1.778P 4.7K*8 1/8W |
| D02 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 *MONO |
| FR601 | 0RF0470H609 | R,FUSIBLE 0.47 1/2W 5% |
| FR602 | 0RF0470J607 | R,FUSIBLE 0.47 1W 5% |
| FR704 | 0RF0470H609 | R,FUSIBLE 0.47 1/2W 5 |
| ⚠ FR742 | 0RF0470J607 | R,FUSIBLE 0.47 1W 5% |
| FR743 | 0RF0470J607 | R,FUSIBLE 0.47 1W 5% |
| FR802 | 0RF0470H609 | R,FUSIBLE 0.47 1/2W 5 |
| FR901 | 0RF0201K607 | R,FUSIBLE 2 2W 5% |
| " | 0RF0331K607 | R,FUSIBLE 3.30 2W 5% *ORION CPT |
| "(14") | 0RF0221K607 | R,FUSIBLE 2.2 2W 5% |
| J68 | 0RD0222F609 | R,CARBON FILM 22 1/6W 5% |
| L680 | 0RD3600F609 | R,CARBON FILM 360 1/6W 5 |
| R01 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R02 | 0RD6200F609 | R,CARBON FILM 620 1/6W 5 |
| R04 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R08 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| R101 | 0RD1202F609 | R,CARBON FILM 12K 1/6W 5 |
| R102 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| R103 | 0RD1802F609 | R,CARBON FILM 18K 1/6W 5 |
| R106 | 0RD0562H609 | R,CARBON FILM 56 1/2W 5 |
| R107 | 0RD0562H609 | R,CARBON FILM 56 1/2W 5 |
| R108 | 0RD0682F609 | R,CARBON FILM 68 1/6W 5 |
| R110 | 0RD5101F609 | R,CARBON FILM 5.1K 1/6W 5 |
| R111 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R112 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R113 | 0RD2201F609 | R,CARBON FILM 2.2K 1/6W 5 |
| R115 | 0RD0562F609 | R,CARBON FILM 56 1/6W 5 |
| R116 | 0RD6801F609 | R,CARBON FILM 6.8K 1/6W 5 |
| R117 | 0RD2201F609 | R,CARBON FILM 2.2K 1/6W 5 |
| R118 | 0RD6800F609 | R,CARBON FILM 680 1/6W 5 |
| R119 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| R120 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| R17 | 0RD4702F609 | R,CARBON FILM 47K 1/6W 5 |
| R18 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R20 | 0RD0102F609 | R,CARBON FILM 10 1/6W 5 |
| R201 | 0RD3302F609 | R,CARBON FILM 33K 1/6W 5 |
| R202 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R203 | 0RD3302F609 | R,CARBON FILM 33K 1/6W 5 |
| R204 | 0RD1001F609 | R,CARBON FILM 1K 1/6W 5 |
| R205 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R206 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R207 | 0RD0472H609 | R,CARBON FILM 47 1/2W 5 |
| R22 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R23 | 0RD1200F609 | R,CARBON FILM 120 1/6W 5 |
| R231 | 0RD0752F609 | R,CARBON FILM 75 1/6W 5 |
| R232 | 0RD0752F609 | R,CARBON FILM 75 1/6W 5 |
| R233 | 0RD0752F609 | R,CARBON FILM 75 1/6W 5 |
| R234 | 0RD0752F609 | R,CARBON FILM 75 1/6W 5 |
| R235 | 0RD0562F609 | R,CARBON FILM 56 1/6W 5 |
| R236 | 0RD0752F609 | R,CARBON FILM 75 1/6W 5 |
| R237 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R238 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R240 | 0RD0752F609 | R,CARBON FILM 75 1/6W 5 |
| R241 | 0RD2203F609 | R,CARBON FILM 220K 1/6W 5 |
| R242 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R243 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R244 | 0RD2203F609 | R,CARBON FILM 220K 1/6W 5 |
| R25 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R290 | 0RD3300H609 | R,CARBON FILM 330 1/2W 5 |
| R291 | 0RD5100H609 | R,CARBON FILM 510 1/2W 5 |
| " | 0RD3300H609 | R,CARBON FILM 330 1/2W 5 *MONO(+EAR) |
| R301(20") | 0RN2701F409 | R,METAL FILM 2.7K 1/6W 1% |
| " | 0RN2201F409 | R,METAL FILM 2.2K 1/6W 1% *ORION CPT |
| "(21") | 0RN3301F409 | R,METAL FILM 3.3K 1/6W 1% |
| "(14") | 0RN1801F409 | R,METAL FILM 1.8K 1/6W 1% |
| R302(20") | 0RD1303F609 | R,CARBON FILM 130K 1/6W 5 |
| " | 0RN1003F409 | R,METAL FILM 100K 1/6W 1*ORION CPT |
| "(21") | 0RD1503F609 | R,CARBON FILM 150K 1/6W 5 |
| "(14") | 0RD1203F609 | R,CARBON FILM 120K 1/6W 5 |
| R304(20") | 0RN0121J607 | R,METAL FILM OXIDE 1.2 1W 5% TA62 |
| " | 0RN0101J607 | R,METAL FILM OXIDE 1 1W 5% *ORION CPT |
| "(21") | 0RN0680J607 | R,METAL FILM OXIDE 0.68 1W 5% TA62 |
| R305 | 0RD0202F609 | R,CARBON FILM 20 1/6W 5 TA52 |
| R306(21") | 0RS2200K607 | R,METAL FILM OXIDE 220 2W 5% |
| " | 0RS2200K607 | R,METAL FILM OXIDE 220 2W 5%*ORION CPT |
| "(20") | 0RS1800K607 | R,METAL FILM OXIDE 180 2W 5% |

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| R307 | 0RN3301F409 | R,METAL FILM 3.3K 1/6W 1% |
| " | 0RN3302F409 | R,METAL FILM 33K 1/6W 1%*ORION CPT |
| "(20") | 0RN3602F409 | R,METAL FILM 36K 1/6W 1% |
| "(14") | 0RN3901F409 | R,METAL FILM 3.9K 1/6W 1% |
| R308 | 0RD0562H609 | R,CARBON FILM 56 1/2W 5 |
| "(14") | 0RD0752H609 | R,CARBON FILM 75 1/2W 5 |
| R309 | 0RD0562H609 | R,CARBON FILM 56 1/2W 5 |
| "(14") | 0RD0752H609 | R,CARBON FILM 75 1/2W 5 |
| R32 | 0RD2401F609 | R,CARBON FILM 2.4K 1/6W 5 |
| R33 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R36 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R37 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R402 | 0RS2702K607 | R,METAL FILM OXIDE 27K 2W 5% |
| " | 0RS1502K607 | R,METAL FILM OXIDE 15K 2W 5%*ORION CPT |
| "(14") | 0RS2202K607 | R,METAL FILM OXIDE 22K 2W 5% |
| R42 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R501 | 0RD3900F609 | R,CARBON FILM 390 1/6W 5 |
| R502 | 0RD1800F609 | R,CARBON FILM 180 1/6W 5 |
| R503 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R504 | 0RD4702F609 | R,CARBON FILM 47K 1/6W 5 |
| R505 | 0RD3001F609 | R,CARBON FILM 3K 1/6W 5 |
| R506 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R507 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R508 | 0RD3300F609 | R,CARBON FILM 330 1/6W 5 |
| R510 | 0RD1200F609 | R,CARBON FILM 120 1/6W 5 |
| R511 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R513 | 0RD1003F609 | R,CARBON FILM 100K 1/6W 5 |
| R52 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R520 | 0RD1200F609 | R,CARBON FILM 120 1/6W 5 |
| R521 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R522 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R525 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R531 | 0RD2403F609 | R,CARBON FILM 240K 1/6W 5 |
| "(14") | 0RD1303F609 | R,CARBON FILM 130K 1/6W 5 |
| R532 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R533 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R534 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R535 | 0RD1501F609 | R,CARBON FILM 1.5K 1/6W 5 |
| R536 | 0RD1503F609 | R,CARBON FILM 150K 1/6W 5 |
| R538 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R539 | 0RD3300F609 | R,CARBON FILM 330 1/6W 5 |
| R549 | 0RD3001F609 | R,CARBON FILM 3.0K 1/6W 5 |
| R550 | 0RD2702F609 | R,CARBON FILM 27K 1/6W 5 |
| R551 | 0RD1502F609 | R,CARBON FILM 15K 1/6W 5 |
| R552 | 0RD1502F609 | R,CARBON FILM 15K 1/6W 5 |
| R554 | 0RD9102F609 | R,CARBON FILM 91K 1/6W 5 |
| R555 | 0RN3902F409 | R, METAL FILM 39K 1/6W 1% |
| R556 | 0RD1201F609 | R,CARBON FILM 1.2K 1/6W 5 |
| R557 | 0RD5100F609 | R,CARBON FILM 510 1/6W 5 |
| R566 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R567 | 0RD2201F609 | R,CARBON FILM 2.2K 1/6W 5 |
| R568 | 0RD5600F609 | R,CARBON FILM 560 1/6W 5 |
| R59 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R601 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| " | 0RD3901F609 | R,CARBON FILM 3.9K 1/6W 5 *RF.ST |
| R602 | 0RD2701F609 | R,CARBON FILM 2.7K 1/6W 5 |
| " | 0RD1801F609 | R,CARBON FILM 1.8K 1/6W 5 *RF.ST |
| R603 | 0RD0331H609 | R,CARBON FILM 3.3 1/2W 5 |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| R604 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| " | 0RD3901F609 | R,CARBON FILM 3.9K 1/6W 5 *RF.ST |
| R606 | 0RD0331H609 | R,CARBON FILM 3.3 1/2W 5 |
| R608 | 0RD2701F609 | R,CARBON FILM 2.7K 1/6W 5 |
| " | 0RD1801F609 | R,CARBON FILM 1.8K 1/6W 5 *RF.ST |
| R610 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| ⚠ R612 | 0RD1500F609 | R,CARBON FILM 150 1/6W 5 |
| R613 | 0RD6802F609 | R,CARBON FILM 68K 1/6W 5 |
| R615 | 0RD1003F609 | R,CARBON FILM 100K 1/6W 5 |
| R616 | 0RD1003F609 | R,CARBON FILM 100K 1/6W 5 |
| R63 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R631 | 0RD3001F609 | R,CARBON FILM 3K 1/6W 5 |
| R632 | 0RD3901F609 | R,CARBON FILM 3.9K 1/6W 5 |
| R633 | 0RD1003F609 | R,CARBON FILM 100K 1/6W 5 |
| R634 | 0RD6801F609 | R,CARBON FILM 6.8K 1/6W 5 |
| R635 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R637 | 0RD1003F609 | R,CARBON FILM 100K 1/6W 5 |
| R651 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R652 | 0RD1501F609 | R,CARBON FILM 1.5K 1/6W 5 |
| R653 | 0RD4700F609 | R,CARBON FILM 470 1/6W 5 |
| R654 | 0RD3301F609 | R,CARBON FILM 3.3K 1/6W 5 |
| R655 | 0RD9101F609 | R,CARBON FILM 9.1K 1/6W 5 |
| R656 | 0RD1500F609 | R,CARBON FILM 150 1/6W 5 |
| R657 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R658 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R659 | 0RD3000F609 | R,CARBON FILM 300 1/6W 5 |
| R660 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R662 | 0RD2400F609 | R,CARBON FILM 240 1/6W 5 |
| R663 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R664 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R665 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R666 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R667 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R668 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R68 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R680 | 0RD3902F609 | R,CARBON FILM 39K 1/6W 5 |
| R681 | 0RD4703F609 | R,CARBON FILM 470K 1/6W 5 |
| R682 | 0RD1502F609 | R,CARBON FILM 15K 1/6W 5 |
| R686 | 0RD1003F609 | R,CARBON FILM 100K 1/6W 5 |
| R687 | 0RD4702F609 | R,CARBON FILM 47K 1/6W 5 |
| R688 | 0RD4702F609 | R,CARBON FILM 47K 1/6W 5 |
| R689 | 0RD2201F609 | R,CARBON FILM 2.2K 1/6W 5 |
| R690 | 0RD8201F609 | R,CARBON FILM 8.2K 1/6W 5 |
| R70 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R72 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R720 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| R721 | 0RD1003F609 | R,CARBON FILM 100K 1/6W 5 |
| R723 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R724 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R725 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| R727 | 0RD0102F609 | R,CARBON FILM 10 1/6W 5 |
| R74 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R742 | 0RD5100H609 | R,CARBON FILM 510 1/2W 5 |
| R745 | 0RS0332H609 | R,METAL FILM OXIDE 33 1/2W 5 |
| R747 | 0RD5101F609 | R,CARBON FILM 5.1K 1/6W 5 |
| " | 0RD5101F609 | R,CARBON FILM 5.1K 1/6W 5*ORION CPT |
| "(20") | 0RD5101F609 | R,CARBON FILM 5.1K 1/6W 5 |
| "(14") | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| R750 | 0RD4701H609 | R,CARBON FILM 4.7K 1/2W 5 |
| R752 | 0RD1201H609 | R,CARBON FILM 1.2K 1/2W 5 |
| R753 | 0RD8201H609 | R,CARBON FILM 8.2K 1/2W 5 |
| R754 | 0RD2001F609 | R,CARBON FILM 2.0K 1/6W 5 |
| R801 | 0RD2701F609 | R,CARBON FILM 2.7K 1/6W 5 |
| R802 | 0RD2201F609 | R,CARBON FILM 2.2K 1/6W 5 |
| R803 | 0RD6800F609 | R,CARBON FILM 680 1/6W 5 |
| R805 | 180-A01P | R,CEMENT 0.13 OHM 2 W 5% *AV STEREO |
| " | 180-A01N | R,CEMENT 0.18 OHM 2 W 5% *MONO |
| R806 | 0RD2401F609 | R,CARBON FILM 2.4K 1/6W 5 |
| R809 | 0RS4702K607 | R,METAL FILM OXIDE 47K 2W 5% |
| R811 | 180-822N | R,RWR 7W 1.0 OHM J PD |
| R812 | 180-C02H | R,CARBON COMPOSIT RC 1/2W 8.2M K |
| R813 | 0RS0101H609 | R,METAL FILM OXIDE 1.0 1/2W 5 |
| R814 | 0RD4702F609 | R,CARBON FILM 47K 1/6W 5 |
| R815 | 0RD0272H609 | R,CARBON FILM 27 1/2W 5 *AV STEREO |
| " | 0RD0182H609 | R,CARBON FILM 18 1/2W 5 *MONO |
| R816 | 0RD2001F609 | R,CARBON FILM 2.0K 1/6W 5 |
| R817 | 0RS2202K607 | R,METAL FILM OXIDE 22K 2W 5% |
| R90 | 0RD6200F609 | R,CARBON FILM 620 1/6W 5 |
| R901 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R902 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R903 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R904(14") | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R905(14") | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R907 | 0RS1501H609 | R,METAL FILM OXIDE 1.5K 1/2W 5 |
| R908 | 0RS1501H609 | R,METAL FILM OXIDE 1.5K 1/2W 5 |
| R909 | 0RS1501H609 | R,METAL FILM OXIDE 1.5K 1/2W 5 |
| R911 | 0RD2204H609 | R,CARBON FILM 2.2M 1/2W 5 |
| **SWITCH** | | |
| SW01 | 140-315A | SWITCH,TACT VERT |
| SW02 | 140-315A | SWITCH,TACT VERT |
| SW03 | 140-315A | SWITCH,TACT VERT |
| SW04 | 140-315A | SWITCH,TACT VERT |
| SW05 | 140-315A | SWITCH,TACT VERT |
| SW06 | 140-315A | SWITCH,TACT VERT |
| ⚠ SW801 | 6600VM2002A | SWITCH,PUSH IEC 4A/128A250V 6. |
| **CRYSTAL & FILTER** | | |
| T501 | 166-C04C | FILTER,TRAP TPWA02B-TF21 |
| T503 | 166-C02D | FILTER,TRAP TPS6.0MB-TF21 |
| T504 | 166-C02B | FILTER,TRAP TPS4.5MB |
| T801 | 150-F06W | FILTER(CIRC),LINE SQE2930 36MH |
| X501 | 156-A01C | CRYSTAL 3.579545 90 OHM |
| X502 | 156-A01V | CRYSTAL,STD 80 OHM |
| Z101 | 166-A01Z | FILTER(CIRC),SAW OFWK2973M 38MHZ. |
| " | 166-A01M | FILTER, 0FWK6265K(MONO) |
| Z652 | 166-B02E | FILTER,B.P FILTER SFSH6.5MCB-TF21 |
| Z653 | 166-B02D | FILTER,B.P FILTER SFSH6.0MCB-TF21 |
| Z654 | 166-B02A | FILTER,SFSH4.5MCB-TF21 |
| Z651 | 166-B02C | FILTER,B.P FILTER SFSH5.5MCB-TF21 |
| **SUB(A/V STEREO) BOARD** | | |
| CS01 | 0CQ2231N509 | C,POLYESTER(MYLAR) 0.022MF 100V K |
| CS02 | 0CQ2231N509 | C,POLYESTER(MYLAR) 0.022MF 100V K |
| CS03 | 0CQ4721N509 | C,POLYESTER(MYLAR) 0.0047U 100V K |

The components identified by shading and mark ⚠ are critical for safety.
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| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| CS04 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| CS05 | 0CQ1221N419 | C,POLYESTER(MYLAR) 0.0012U 100V J |
| CS06 | 0CQ5621N509 | C,POLYESTER(MYLAR) 5600PF 100V K |
| CS07 | 181-007J | CAPACITOR MPE 50V 0.56UF J(TR) |
| CS08 | 0CE2251K636 | C,ELECTROLYTIC 2.2UF SM 50V M |
| CS09 | 0CE2251K636 | C,ELECTROLYTIC 2.2UF SM 50V M |
| CS10 | 0CE2251K636 | C,ELECTROLYTIC 2.2UF SM 50V M |
| CS11 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| CS12 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| CS13 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| CS14 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| CS15 | 0CQ2231N509 | C,POLYESTER(MYLAR) 0.022MF 100V K |
| CS16 | 0CQ1831N509 | C,POLYESTER(MYLAR) 0.018U 100V K |
| CS17 | 0CQ2231N509 | C,POLYESTER(MYLAR) 0.022MF 100V K |
| CS18 | 0CQ1831N509 | C,POLYESTER(MYLAR) 0.018U 100V K |
| CS19 | 0CQ5621N509 | C,POLYESTER(MYLAR) 5600PF 100V K |
| CS20 | 0CQ5621N509 | C,POLYESTER(MYLAR) 5600PF 100V K |
| CS21 | 0CE474DK618 | C,AL.ELECTROLYTIC 0.47UF STD 50V |
| CS22 | 181-007H | C,MPE 50V 0.47UF J(TR) |
| CS23 | 181-007H | C,MPE 50V 0.47UF J(TR) |
| CS25 | 181-007H | C,MPE 50V 0.47UF J(TR) |
| CS26 | 181-007H | C,MPE 50V 0.47UF J(TR) |
| CS27 | 0CE226DF618 | C,ELECTROLYTIC 22UF STD 16V M |
| CS28 | 0CE106DF618 | C,ELECTROLYTIC 10UF STD 16V M |
| CS29 | 0CN1040K949 | C,TUBULA(HIGH DIELE) 0.1M 50V Z |
| ICS01 | 0ISG742900A | IC,TDA7429 42P,SDIP BK DIGITAL CO |
| LS01 | 0LA0102K119 | INDUCTOR,10UH K |
| RS01 | 0RD5601F609 | R,CARBON FILM 5.6K 1/6W 5 |
| RS02 | 0RD5601F609 | R,CARBON FILM 5.6K 1/6W 5 |
| RS03 | 0RD2701F609 | R,CARBON FILM 2.7K 1/6W 5 |
| RS04 | 0RD2701F609 | R,CARBON FILM 2.7K 1/6W 5 |
| RS05 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| RS06 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |

## SUB(TELETEXT) BOARD

| | | |
|---|---|---|
| C702 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C703 | 0CE107DD618 | C,ELECTROLYTIC 100UF STD 10V M |
| C704 | 0CX1800K409 | C,TUBULA(T.C) 18PF 50V J |
| C705 | 0CX8R20K509 | C,TUBULA(T.C) 8.2P 50V K |
| C706 | 0CN1040K949 | C,TUBULA(HIGH DIELE) 0.1M 50V Z |
| C707 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| C708 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| C709 | 181-442Z | C,POLYESTER(MYLAR) 0.1MF 50V K |
| C710 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C711 | 0CE476DD618 | C,ELECTROLYTIC 47UF STD 10V M |
| C712 | 0CE476DD618 | C,ELECTROLYTIC 47UF STD 10V M |
| C713 | 0CN1020K519 | C,TUBULA(HIGH DIELE) 1000PF 50V K |
| IC701 | 0IPH528100J | IC,SAA5281ZP/R 52SDIP BK TXT DECO |
| IC702 | 0IKE780500K | IC,KIA7805PI 3P(TO-220IS) 5V,1A |
| L701 | 0LA0331K119 | INDUCTOR 3.3UH K 2.3*3.4 TP |
| Q701 | 0TR945009AA | TR,KSC945C-Y |
| R702 | 0RD3301F609 | R,CARBON FILM 3.3K 1/6W 5 |
| R703 | 0RD2702F609 | R,CARBON FILM 27K 1/6W 5 |
| R704 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R705 | 0RD1601F609 | R,CARBON FILM 1.6K 1/6W 5 |
| R706 | 0RD1601F609 | R,CARBON FILM 1.6K 1/6W 5 |
| R707 | 0RD1601F609 | R,CARBON FILM 1.6K 1/6W 5 |
| R708 | 0RD1601F609 | R,CARBON FILM 1.6K 1/6W 5 |
| R709 | 0RD1601F609 | R,CARBON FILM 1.6K 1/6W 5 |
| R710 | 0RD1601F609 | R,CARBON FILM 1.6K 1/6W 5 |
| R711 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R712 | 0RD8200F609 | R,CARBON FILM 820 1/6W 5 |
| R713 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R715 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R716 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R717 | 0RD4700F609 | R,CARBON FILM 470 1/6W 5 |
| R718 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| X701 | 156-A02X | CRYSTAL,STD SUNNY RADIAL 27MHZ 25PPM |

## ACCESSORIES

| | | |
|---|---|---|
| | 132-199D | ANTENNA,ROD(W/ADAPTER L=650) |
| | 132-210H | ANTENNA,ROD,W/ADAPTER L=650 PAL |
| | 132-210J | ANTENNA,2 POLE 3 SECTION 700MM 750MM P |
| | 132-210G | ANTENNA,ROD W/ADAPTER L=500 |
| | 3828VA0141B | MANUAL,OWNERS MC84A . GS EN 007?/008?TX , , |
| | 3828VA0141D | MANUAL,OWNERS MC84A . LG EN 017F TX 340M BSC |
| | 3828VA0141N | MANUAL,OWNERS MC84A . GS EN TX.BASIC |
| | 3828VA0164L | MANUAL,OWNERS MC84A .LG PL TX 141G |
| | 6710V00017E | REMOTE CONTROLLER MC84A , MONO(W/O EYE),24KEY |
| | 6710V00017F | REMOTE CONTROLLER MC84A , MONO(W EYE),25KEY |
| | 6710V00017L | REMOTE CONTROLLER MC84A ,W/O TXT,W/EYE,NO BRAND |
| | 6710V00017P | REMOTE CONTROLLER MC-84A(STEREO) NO TXT,W/EYE,G/ |
| | 6710V00017Q | REMOTE CONTROLLER MC-84A MONO W/O EYE,GS |
| | 6710V00017J | REMOTE CONTROLLER MC-84A MONO W/O TXT,W/EYE |
| | 6710V00017H | REMOTE CONTROLLER MC-84A STEREO(W/O EYE) |
| | 6710V00020E | REMOTE CONTROLLER MC84A MONO(W EYE), 48KEY |
| | 6710V00020F | REMOTE CONTROLLER MC84A MONO(W/O EYE),45KEY |
| | 6710V00020M | REMOTE CONTROLLER MC84A W/EYE,TXT NO BRAND |
| | 6710V00007K | REMOTE CONTROLLER MC84A (TXT,EYE,STEREO) |

## MISCELLANEOUS

| | | |
|---|---|---|
| | 303-F62A | COVER,TUNER |
| ⚠ F801 | 0FT4001B53C | FUSE,TIME LAG 4000MA 250 V |
| PA01 | 106-047G | PRE-AMP SBX2020-82 38.0KHZ |
| PJ201 | 381-091A | SOCKET,SCART JACK 21PIN |
| " | 6612VJH004B | JACK,RCA PJ6056B 4P MONO |
| PJ241 | 6613V00006A | JACK ASSY,3P+EAR(PJ6062A) |
| " | 6613V00006B | JACK ASSY,2P+EAR(PJ6062B) |
| ⚠ P801 | 174-009E | CORD,POWER(W/HOLD,HOUSING,L=2)0±4.0 |
| P901 | 6620VBC001A | SOCKET,CPT 29.1 PHI SINGLE(PCS62903A) |
| " | 6620VBA001A | SOCKET,CPT PCS633A 14" |
| SG901 | 165-004A | SPARK GAP AG20PT 152F-L3N/S-23 |
| TH801 | 163-012C | THERMISTOR J502P54E180M220 |
| " | 163-054F | THERMISTOR J502P84D140M290Q 14" |
| TU101 | 6700VPF002A | TUNER TELE9-096A ALPS PAL 38.0MHZ FS |
| " | 6700VPF003B | TUNER TU8PSB02D LGEC PAL DIN 38.0MHZ |
| ⚠ T701 | 6174Z-8005A | FBT FTSPN13-T8005A 21" |
| " | 6174Z-8005E | FBT FTSPN13-T8005E 20" |
| " | 6174Z-8005F | FBT FTSPN13-T8005F 14" |
| " | 6174V-8003B | FBT FSA41012M 20,21" D/W |
| " | 6174Z-8005G | FBT FTSPN13-T8005G 21" LGEPL |
| VD801 | 164-003D | VARISTOR,SVC 561D-14A |
| X01 | 166-E05C | RESONATOR,RESO, CST8.00MTW-T |

## SUB (TELETEXT) BOARD

| | | |
|---|---|---|
| C701 | 181-007C | C,MPE 50V 0.1UF J |

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| C702 | 181-007C | C,MPE 50V 0.1UF J |
| C703 | 0CE476DF618 | C,ELECTROLYTIC 47UF STD 16V M |
| C704 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C705 | 0CE107DD618 | C,ELECTROLYTIC 100UF STD 10V M |
| C706 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C707 | 0CC3300K415 | C,CERAMIC(TEMP COMP) 33P 50V J |
| C708 | 0CC3300K415 | C,CERAMIC(TEMP COMP) 33P 50V J |
| C709 | 0CE474DK618 | C,ELECTROLYTIC 0.47UF STD 50V M |
| C710 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C711 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| C712 | 0CE476DF618 | C,ELECTROLYTIC 47UF STD 16V M |
| C713 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| IC701 | 0IPH526100A | IC,SAA5261PS/110 52P SDIP BK PARS |
| IC702 | 0IKE780500K | IC,KIA7805PI 3P(TO-220IS) 5V,1A |
| IC703 | 0IAL240210A | IC,AT24C02-10PC 8D EEPROM(2K,IIC) |
| IC704 | 0IKE744200A | IC,KIA7442P TO-92 NEGA.RESET(4.2V |
| L701 | 0LA0102K119 | INDUCTOR,10UH K |
| Q701 | 0TR945009AA | TR,KSC945C-Y,TP,SS |
| Q702 | 0TR120209AD | TR,KSR1202 TP SAMSUNG TO92S |
| R701 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| R702 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| R703 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| R704 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| R705 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| R706 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R707 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R708 | 0RD2702F609 | R,CARBON FILM 27K 1/6W 5 |
| R709 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R710 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R711 | 0RD4700F609 | R,CARBON FILM 470 1/6W 5 |
| R712 | 0RD1501F609 | R,CARBON FILM 1.5K 1/6W 5 |
| R713 | 0RD1301F609 | R,CARBON FILM 1.3K 1/6W 5 |
| R714 | 0RD1501F609 | R,CARBON FILM 1.5K 1/6W 5 |
| R715 | 0RD1301F609 | R,CARBON FILM 1.3K 1/6W 5 |
| R716 | 0RD1501F609 | R,CARBON FILM 1.5K 1/6W 5 |
| R717 | 0RD1301F609 | R,CARBON FILM 1.3K 1/6W 5 |
| R718 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R719 | 0RD2400F609 | R,CARBON FILM 240 1/6W 5 |
| R72 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R720 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| R721 | 0RD1003F609 | R,CARBON FILM 100K 1/6W 5 |
| R723 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R724 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R725 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| R727 | 0RD0102F609 | R,CARBON FILM 10 1/6W 5 |
| X701 | 156-A02B | CRYSTAL,12.000000 16PF 30 OHM BULK |

## SUB(RF STEREO) BOARD

| | | |
|---|---|---|
| CN01 | 0CE106DF618 | C,ELECTROLYTIC 10UF STD 16V M |
| CN02 | 0CE226DF618 | C,ELECTROLYTIC 22UF STD 16V M |
| CN03 | 0CE107DD618 | C,ELECTROLYTIC 100UF STD 10V M |
| CN04 | 0CE227DD618 | C,ELECTROLYTIC 220UF STD 10V M |
| CN05 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| CN06 | 0CE335DK618 | C,ELECTROLYTIC 3.3UF STD 50V M |
| CN07 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| CN10 | 0CE227DD618 | C,ELECTROLYTIC 220UF STD 10V M |
| CN11 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| CN12 | 0CQ3321N509 | C,POLYESTER(MYLAR) 0.0033U 100V K |

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| CN13 | 0CQ3321N509 | C,POLYESTER(MYLAR) 0.0033U 100V K |
| CN14 | 0CE106DF618 | C,ELECTROLYTIC 10UF STD 16V M |
| CN15 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| CN16 | 0CE107DD618 | C,ELECTROLYTIC 100UF STD 10V M |
| CN17 | 0CE106DF618 | C,ELECTROLYTIC 10UF STD 16V M |
| CN18 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| CN19 | 0CE106DF618 | C,ELECTROLYTIC 10UF STD 16V M |
| CN22 | 181-007G | C,MPE 50V 0.33UF J |
| CN23 | 181-007G | C,MPE 50V 0.33UF J |
| CN24 | 181-007G | C,MPE 50V 0.33UF J |
| CN25 | 181-007G | C,MPE 50V 0.33UF J |
| CN26 | 0CE106DF618 | C,ELECTROLYTIC 10UF STD 16V M |
| CN27 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| CN29 | 0CN1030F679 | C,TUBULA(HIGH DIELE) 0.01MF 16V M |
| CN30 | 0CE106DF618 | C,ELECTROLYTIC 10UF STD 16V M |
| CN31 | 0CX5600K409 | C,TUBULA(T.C) 56P 50V J |
| CN32 | 0CX5600K409 | C,TUBULA(T.C) 56P 50V J |
| CN33 | 0CN4710K519 | C,TUBULA(HIGH DIELE) 470PF 50V K |
| CN34 | 0CC0200K115 | C,CERAMIC(TEMP COMP) 2P 50V D |
| CN35 | 0CC0200K115 | C,CERAMIC(TEMP COMP) 2P 50V D |
| CN36 | 0CE226DF618 | C,ELECTROLYTIC 22UF STD 16V M |
| ICN01 | 0ITF444500C | IC,TDA4445B 16P,DIP BK QPS PROCES |
| ICN02 | 0IKE780500K | IC,KIA7805PI 3P(TO-220IS) 5V,1A |
| ICN03 | 0IIT341000H | IC,MSP3410D 52P,SDIP BK B4-VERSIO |
| ICN04 | 0ISS754200A | IC,KA7542Z RESET TO92 TP 4.2V |
| LN01 | 150-E08L | COIL,VAR,07S 1B 38.0MHZ |
| LN02 | 0LA0222K119 | INDUCTOR,22UH K |
| LN03 | 0LA0102K119 | INDUCTOR,10UH K |
| LN04 | 0LA0102K119 | INDUCTOR,10UH K |
| QN01 | 0TR733009AA | TR,KSA733C-Y TP SANSUNG |
| QN02 | 0TR733009AA | TR,KSA733C-Y TP SANSUNG |
| RN03 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| RN04 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| RN05 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| RN06 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| RN07 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| RN08 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| RN09 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| RN10 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| RN11 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| RN12 | 0RD4701F609 | R,CARBON FILM 4.7K 1/6W 5 |
| RN13 | 0RD3901F609 | R,CARBON FILM 3.9K 1/6W 5 |
| RN14 | 0RD3901F609 | R,CARBON FILM 3.9K 1/6W 5 |
| RN15 | 0RD0102F609 | R,CARBON FILM 10 1/6W 5 |
| XN01 | 156-A02M | CRYSTAL,18.432000 10PF 20 OHM BULK |

## SUB(TELETEXT:MA-PL) BOARD

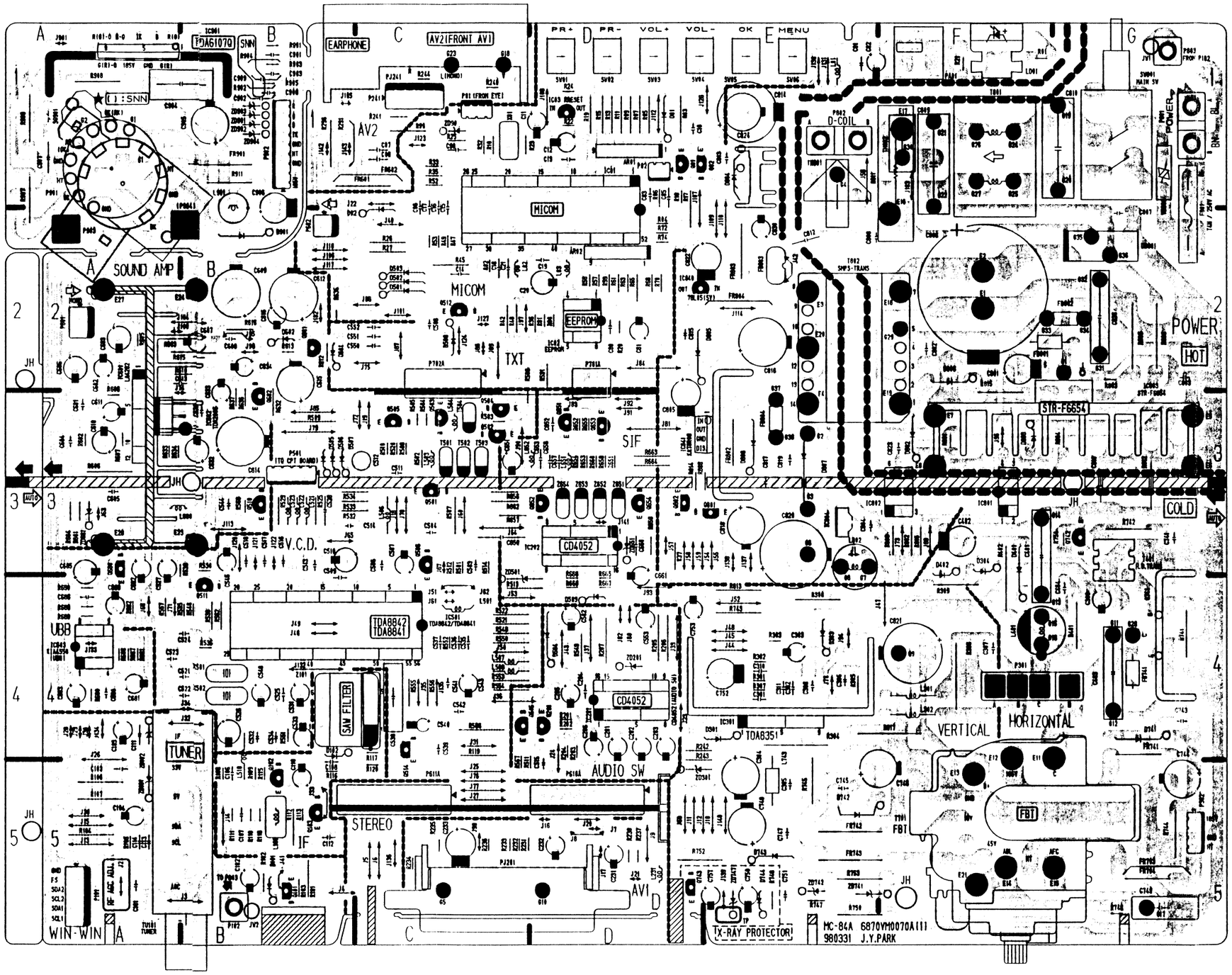
| | | |
|---|---|---|
| C702 | 0CN1030F679 | CAPACITOR 10000P 16V M |
| C703 | 0CE107DD618 | C,ELECTROLYTIC 100UF STD10V M |
| C704 | 0CX1800K409 | CAPACITOR 18P 50V J |
| C705 | 0CX8R20K509 | C TUBULA(T.C) 8.2P 50V K |
| C706 | 0CN1040K949 | C,TUBULAR(HIGH DIELEC)0.1M 50V Z |
| C707 | 181-442Z | C,POLYESTER PE,ECQ-B1H104KF3(TR) |
| C708 | 181-442Z | C,POLYESTER PE,ECQ-B1H104KF3(TR) |
| C709 | 181-442Z | C,POLYESTER PE,ECQ-B1H104KF3(TR) |
| C710 | 0CN1030F679 | CAPACITOR 10000P 16V M |
| C711 | 0CE476DD618 | C,AL.ELECTROLYTIC 47UF STD10V M |
| C712 | 0CE476DD618 | C,AL.ELECTROLYTIC 47UF STD10V M |

| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|
| C713 | 0CN1020K519 | CAPACITOR 1000P 50V K |
| IC701 | 0IPH528100H | IC,SAA5281ZP/H 52SDIP BK TXT DECO |
| IC702 | 0IKE780500K | IC,KIA7805PI 3P(TO-220IS) 5V,1A |
| L701 | 0LA0331K119 | INDUCTOR,3.3UH K |
| Q701 | 0TR945009AA | TR,KSC945C-Y TP SAMSUNG |
| R702 | 0RD3301F609 | R,CARBON FILM 3.3K 1/6W 5 |
| R703 | 0RD2702F609 | R,CARBON FILM 27K 1/6W 5 |
| R704 | 0RD1002F609 | R,CARBON FILM 10K 1/6W 5 |
| R705 | 0RD1601F609 | R,CARBON FILM 1.6K 1/6W 5 |
| R706 | 0RD1601F609 | R,CARBON FILM 1.6K 1/6W 5 |
| R707 | 0RD1601F609 | R,CARBON FILM 1.6K 1/6W 5 |
| R708 | 0RD1601F609 | R,CARBON FILM 1.6K 1/6W 5 |
| R709 | 0RD1601F609 | R,CARBON FILM 1.6K 1/6W 5 |
| R710 | 0RD1601F609 | R,CARBON FILM 1.6K 1/6W 5 |
| R711 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| R712 | 0RD8200F609 | R,CARBON FILM 820 1/6W 5 |
| R713 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R715 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R716 | 0RD1000F609 | R,CARBON FILM 100 1/6W 5 |
| R717 | 0RD4700F609 | R,CARBON FILM 470 1/6W 5 |
| R718 | 0RD2200F609 | R,CARBON FILM 220 1/6W 5 |
| R719 | 0RD1001F609 | R,CARBON FILM 1.0K 1/6W 5 |
| X701 | 156-A02X | CRYSTAL,STANDARD HC49U 27.000MHZ |

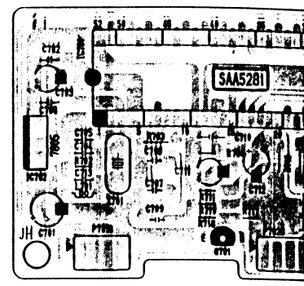
| LOCA. NO | PART NO | DESCRIPTION |
|---|---|---|

# PRINTED CIRCUIT BOARD

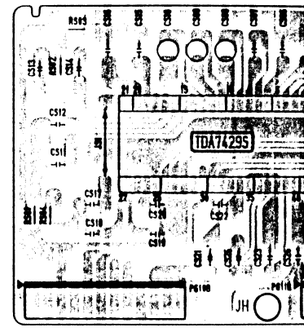
## MAIN




## TXT



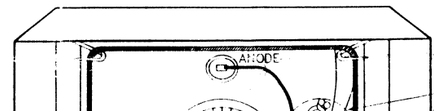

## AV STEREO



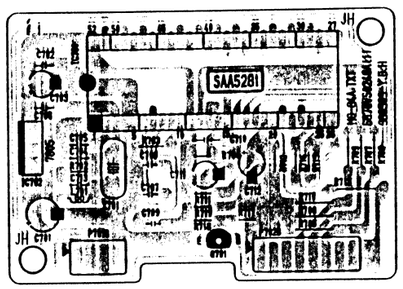

## COMPONENT LOCATION GUIDE(MAIN)

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AR01 | D1 | C514 | C3 | C746 | F5 | D805 | D3 | IC801 | F3 | Q506 | C4 | R107 | A5 | R538 | B4 | R754 | G3 |
| AR02 | D2 | C515 | D5 | C747 | E5 | D806 | F2 | IC802 | F3 | Q510 | B3 | R108 | B5 | R539 | B3 | R801 | F3 |
| C01 | E1 | C516 | B4 | C748 | E5 | D807 | E3 | IC803 | G2 | Q511 | B4 | R109 | B5 | R540 | B4 | R802 | F3 |
| C02 | E1 | C517 | B4 | C749 | G5 | D808 | E3 | IC804 | E3 | Q512 | C2 | R110 | B5 | R548 | C4 | R803 | G2 |
| C03 | D1 | C518 | B4 | C750 | E5 | D901 | B2 | IC840 | D2 | Q514 | C5 | R111 | B5 | R549 | D4 | R804 | G3 |
| C05 | D2 | C521 | A4 | C751 | E5 | DB801 | G2 | IC841 | E3 | Q516 | C4 | R112 | B5 | R550 | C4 | R805 | G2 |

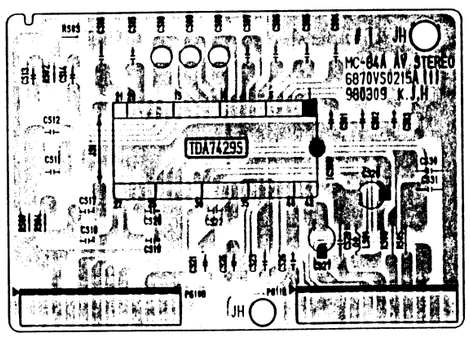
## WIR



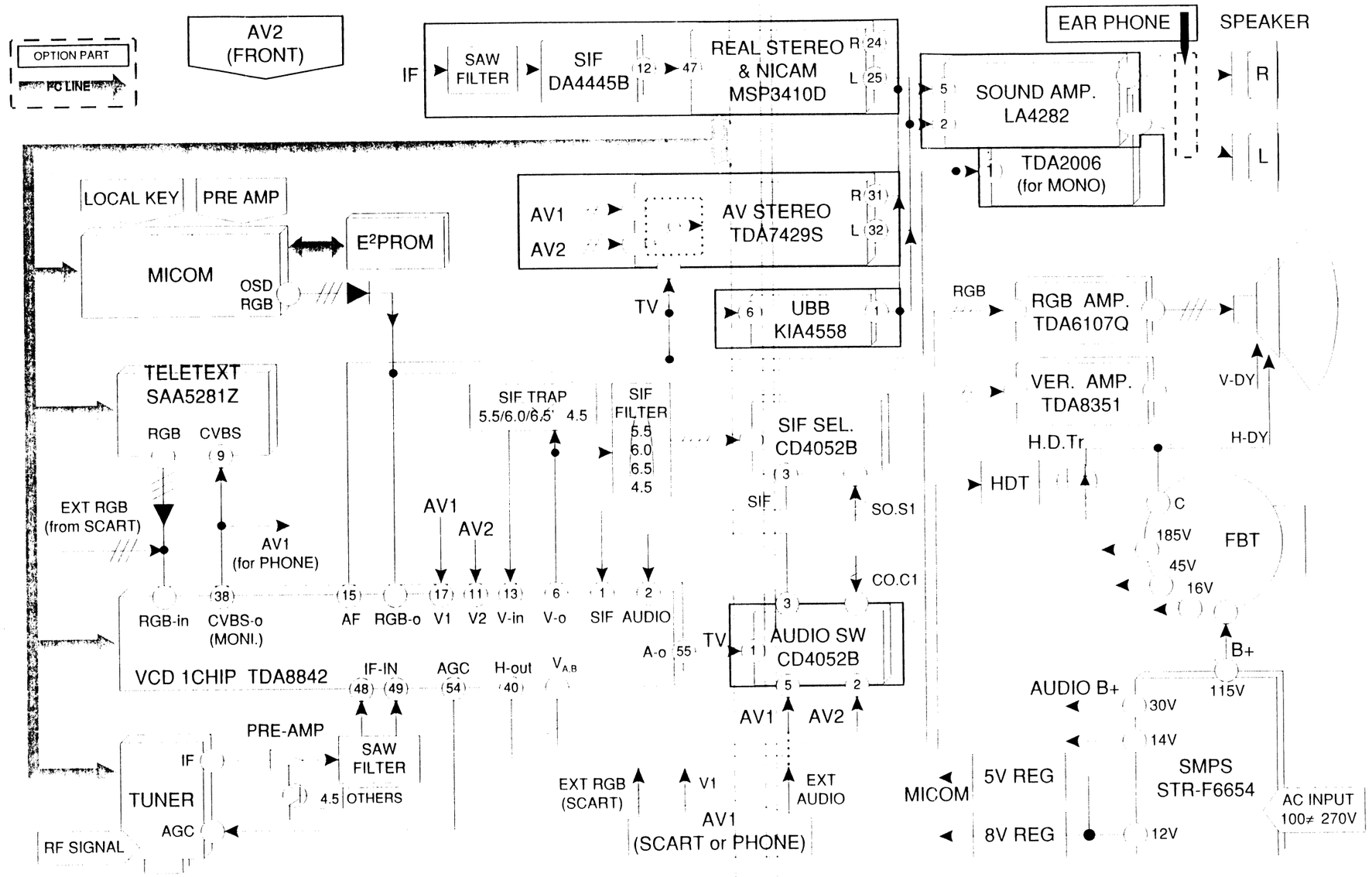
## TXT




## AV STEREO

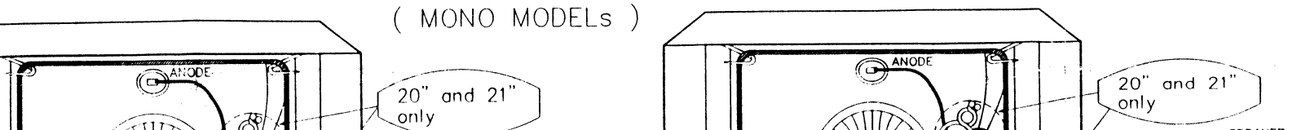



# BLOCK DIAGRAM

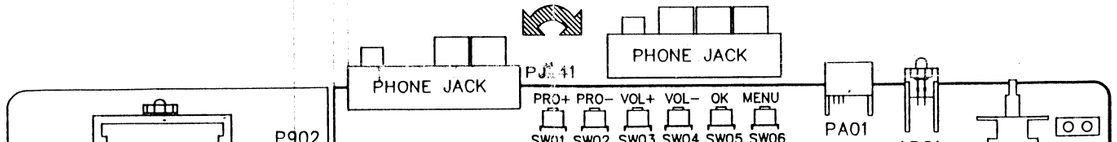


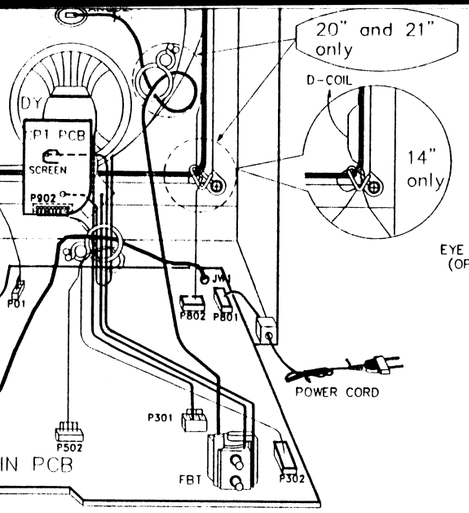

# WIRING DIAGRAM

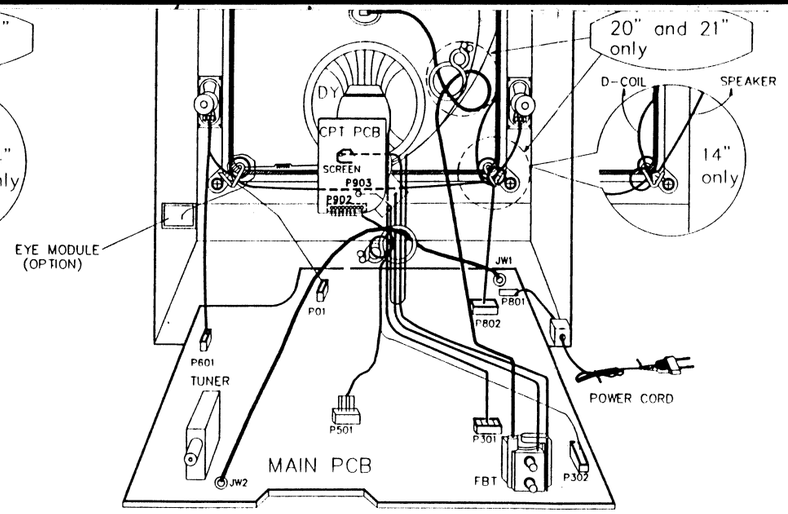
( MONO MODELs )




# ALIGNMENT/TEST POINT LOCATION GUIDE



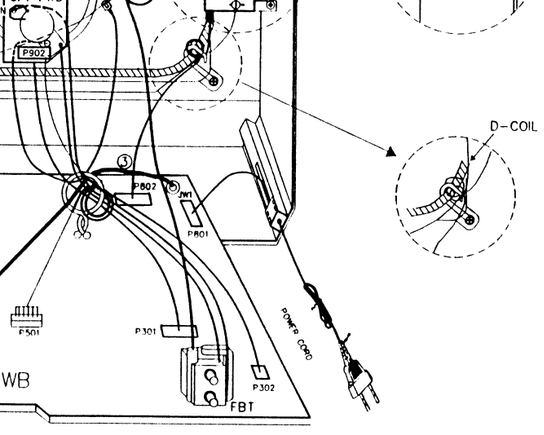



GRAM OF MC-84A

IAGRAM OF MC-84A CHASSIS
LE AS FOLLOW MODELS:
STEREO, SOUND MAX MODELs)

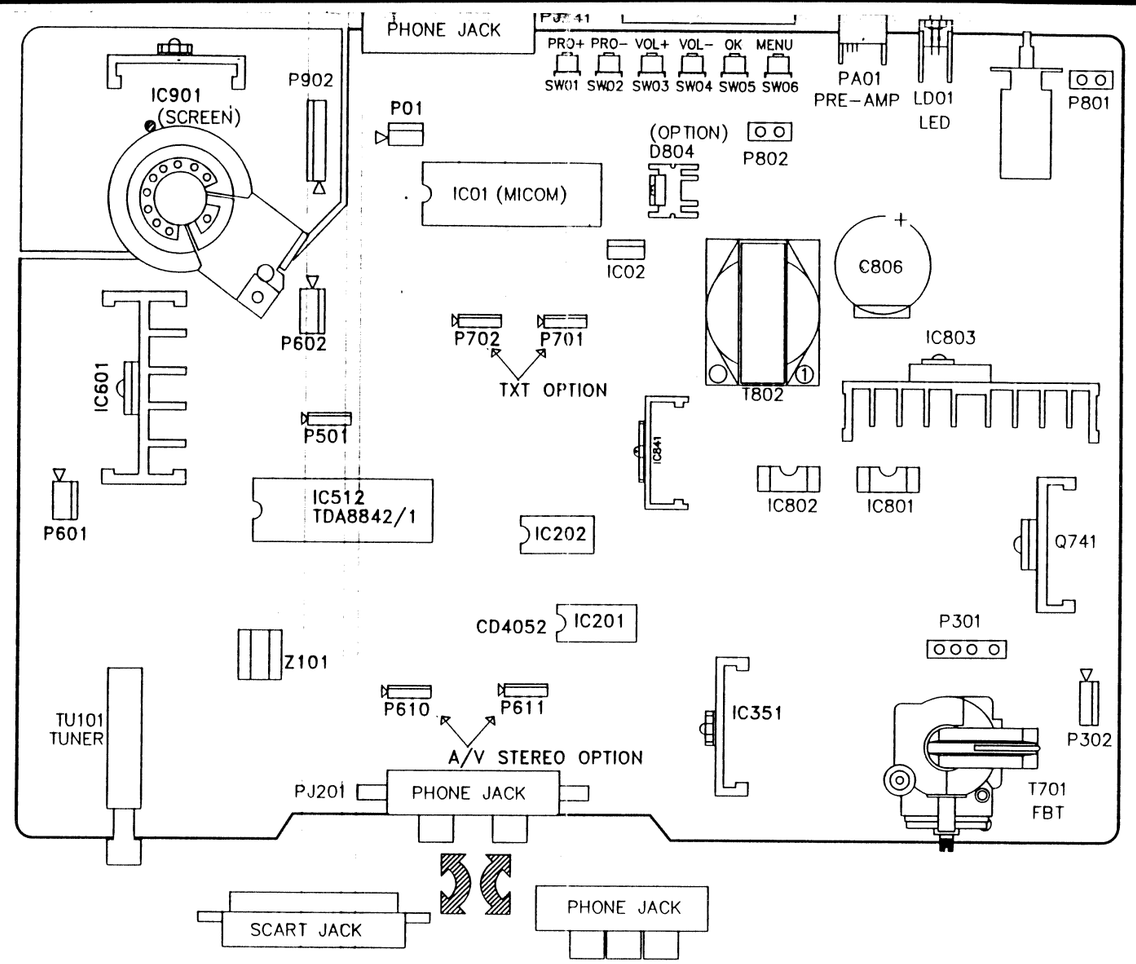
FOR 20", 21"



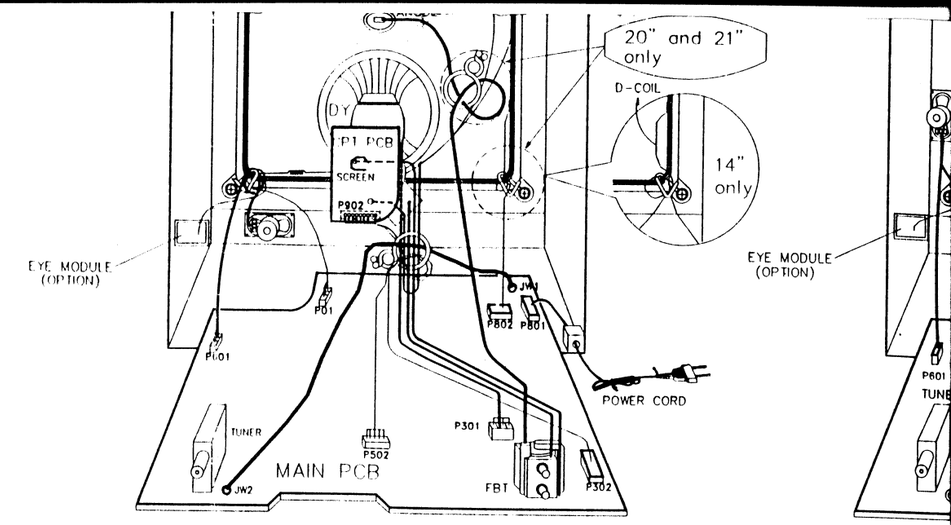

WB

POWER CORD ASSY



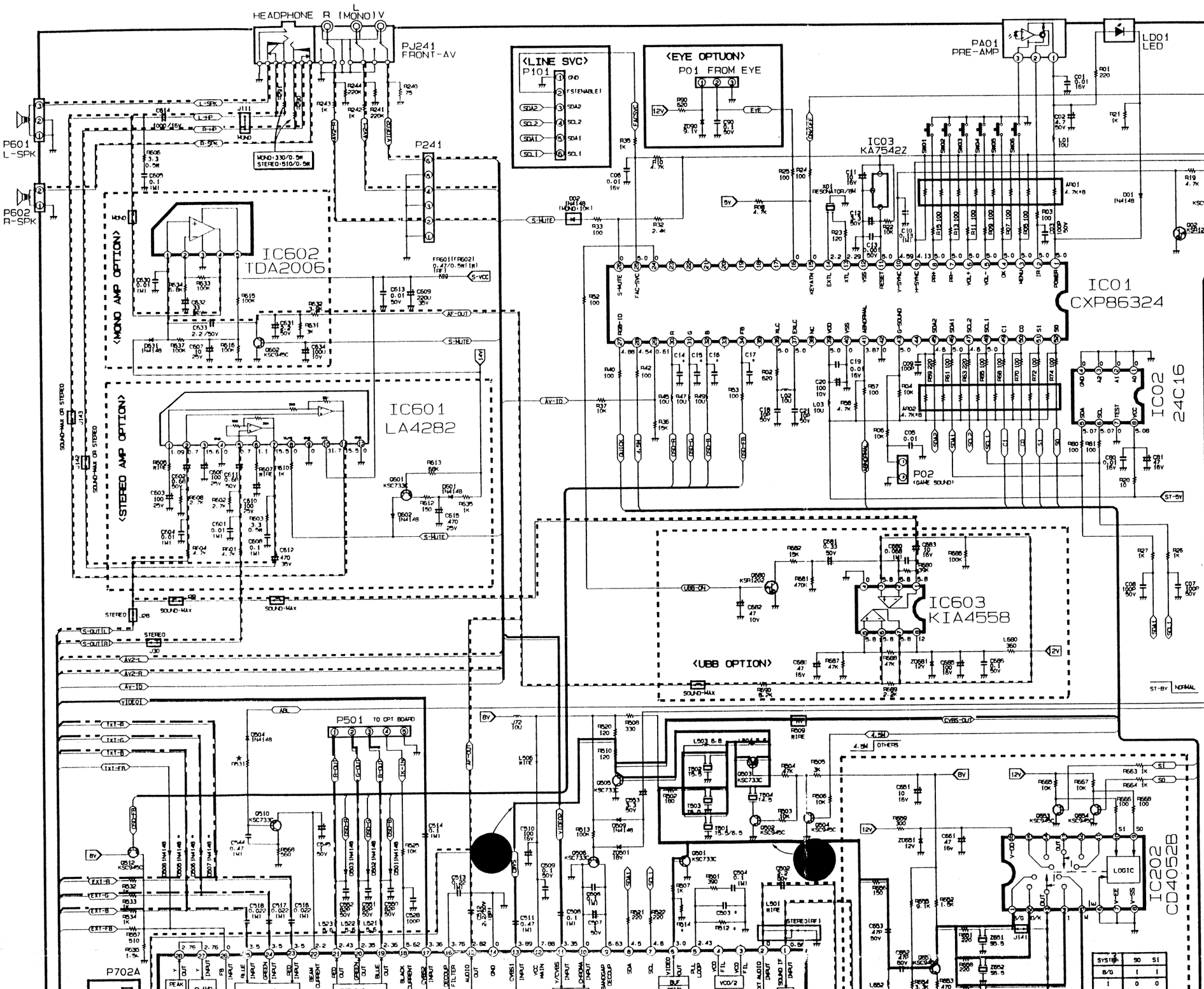
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C03 D1 | C518 B4 | C750 E5 | D901 B2 | IC840 D2 | Q514 C5 | R111 B5 | R549 D4 | R804 G3 | |
| C05 D2 | C521 A4 | C751 E5 | DB801 G2 | IC841 E3 | Q516 C4 | R112 B5 | R550 C4 | R805 G2 | |
| C06 C2 | C522 A4 | C752 E4 | F801A G2 | IC901 A1 | Q601 B2 | R113 B5 | R551 B4 | R806 F3 | |
| C07 C1 | C523 A4 | C753 D4 | F801B G1 | L01 E1 | Q602 B3 | R115 B5 | R552 C4 | R808 E3 | |
| C08 C1 | C524 B4 | C757 E5 | FB741 G4 | L02 C2 | Q651 D3 | R116 B5 | R553 C4 | R809 G2 | |
| C10 D1 | C525 B4 | C801 F2 | FB801 G2 | L03 D2 | Q652 D3 | R117 C4 | R554 C4 | R811 F1 | |
| C11 D1 | C526 B4 | C802 F2 | FB802 F2 | L101 B5 | Q653 D3 | R118 B5 | R555 C4 | R812 G3 | |
| C12 D1 | C527 A4 | C803 G2 | FB803 E2 | L231 D5 | Q654 D3 | R119 C4 | R556 C4 | R813 E4 | |
| C13 D1 | C528 B3 | C804 E3 | FB804 E3 | L301 F4 | Q680 A4 | R120 C5 | R557 A4 | R814 D3 | |
| C14 C2 | C531 B4 | C805 D3 | FR601 B1 | L302 F4 | Q741 G4 | R201 D4 | R562 B4 | R815 F3 | |
| C15 C2 | C532 B4 | C806 F2 | FR602 B1 | L401 F4 | Q742 G3 | R202 D4 | R566 C4 | R816 F3 | |
| C16 C2 | C533 B4 | C807 G2 | FR703 G5 | L501 C4 | Q743 D5 | R203 D5 | R567 C5 | R817 E4 | |
| C17 C2 | C534 B4 | C808 E2 | FR704 G5 | L503 C3 | Q801 E3 | R204 D4 | R568 B3 | R901 B1 | |
| C18 C2 | C535 C4 | C809 F2 | FR741 G4 | L504 C3 | Q802 D3 | R205 D4 | R601 A3 | R902 B1 | |
| C19 D2 | C536 C4 | C810 G1 | FR742 E5 | L506 C3 | R01 F1 | R206 D4 | R602 A3 | R903 B1 | |
| C20 D2 | C537 C4 | C811 G3 | FR743 E5 | L507 C4 | R02 C2 | R207 D4 | R603 A2 | R904 B1 | |
| C21 C2 | C538 C4 | C812 E2 | FR802 E3 | L508 C4 | R03 D1 | R231 C5 | R604 A3 | R905 B1 | |
| C80 D2 | C539 C5 | C813 E1 | FR803 E2 | L510 B4 | R04 D2 | R232 C5 | R605 A2 | R907 A2 | |
| C81 D2 | C540 C4 | C814 E1 | FR804 D2 | L521 B3 | R05 D1 | R233 C5 | R606 A3 | R908 A1 | |
| C90 C1 | C541 C4 | C815 D2 | FR901 B1 | L522 B3 | R06 D2 | R234 C5 | R607 A3 | R909 A1 | |
| C101 A5 | C542 C4 | C816 E2 | G1 G2 | L523 B3 | R07 D1 | R235 C5 | R608 A3 | R911 B1 | |
| C102 B5 | C543 C4 | C817 E3 | G2 E3 | L651 D3 | R09 D1 | R236 C5 | R610 A2 | SG901 A1 | |
| C103 A5 | C544 B3 | C818 E3 | G3 E3 | L652 D3 | R10 C1 | R237 D5 | R612 B2 | SW01 D1 | |
| C104 A5 | C545 B3 | C819 E3 | G4 E1 | L680 B3 | R11 D1 | R238 D5 | R613 B2 | SW02 D1 | |
| C105 A4 | C548 B4 | C820 E3 | G5 C5 | L743 E5 | R13 D1 | R240 C1 | R615 B2 | SW03 D1 | |
| C106 B5 | C550 C2 | C821 F4 | G6 E3 | L802 E3 | R15 D1 | R241 C1 | R616 B2 | SW04 D1 | |
| C107 B5 | C551 C2 | C822 E2 | G7 E3 | L901 B2 | R17 D2 | R242 D4 | R632 B3 | SW05 E1 | |
| C108 B5 | C552 C2 | C823 F3 | G8 E3 | LD01 F1 | R18 D1 | R243 D5 | R633 A3 | SW06 E1 | |
| C110 B5 | C553 D4 | C824 E1 | G9 F4 | P01 C1 | R19 D1 | R244 C1 | R634 A3 | SW801 G1 | |
| C111 A4 | C601 A3 | C829 G2 | G10 D5 | P02 D1 | R20 D2 | R290 B1 | R635 B2 | T401 G4 | |
| C112 B5 | C602 A2 | C830 E2 | G11 G4 | P101 A5 | R21 F1 | R291 B1 | R636 B3 | T501 C3 | |
| C113 A5 | C603 A2 | C901 B1 | G12 G4 | P102 B5 | R22 D1 | R301 E4 | R637 B3 | T502 C3 | |
| C114 A5 | C604 A3 | C902 B1 | G13 F4 | P241 C1 | R23 C1 | R302 E4 | R651 D3 | T503 C3 | |
| C201 D4 | C605 A3 | C903 B1 | G14 F3 | P302 G5 | R24 D1 | R303 E4 | R652 D3 | T504 C3 | |
| C202 D4 | C606 A2 | C904 A1 | G15 F4 | P501 B3 | R25 C1 | R304 E4 | R653 D3 | T701 F5 | |
| C203 D4 | C607 B2 | C905 B1 | G16 F4 | P601 A2 | R26 C2 | R305 E4 | R654 D3 | T801 F1 | |
| C204 D4 | C608 B2 | C906 B2 | G17 G5 | P602 B2 | R27 C2 | R306 F4 | R655 D3 | T802 F3 | |
| C205 D4 | C609 B2 | C907 A1 | G18 C1 | P803 G1 | R32 C1 | R307 E4 | R656 C3 | TH801 E2 | |
| C206 D4 | C610 A3 | C908 B1 | G19 G1 | P901 A1 | R33 C1 | R308 E4 | R657 C3 | TH802 F1 | |
| C231 D5 | C611 A3 | C909 B1 | G20 G1 | P902 B1 | R35 C1 | R309 F4 | R658 D3 | TU101 B5 | |
| C232 D5 | C612 B2 | D01 D1 | G21 F1 | P903 A2 | R36 D2 | R401 G4 | R659 D3 | VD801 G1 | |
| C233 C5 | C613 A3 | D02 C2 | G22 F2 | P904 B2 | R37 D3 | R402 F4 | R660 D3 | X01 C1 | |
| C301 E4 | C614 B3 | D101 B5 | G23 C1 | P301A F4 | R40 C2 | R501 C4 | R662 C3 | X501 B4 | |
| C302 E4 | C615 B2 | D102 B4 | G24 F1 | P301B F4 | R42 C2 | R502 C3 | R663 D3 | X502 B4 | |
| C303 E4 | C616 B2 | D301 E4 | G25 F1 | P301C F4 | R45 C2 | R503 C3 | R664 D3 | Z101 C4 | |
| C304 E5 | C630 B3 | D303 E4 | G26 F1 | P301D G4 | R47 C2 | R504 C3 | R665 D4 | Z651 D3 | |
| C305 E5 | C632 B3 | D304 F3 | G27 F1 | P610A D5 | R49 C2 | R505 C3 | R666 D4 | Z652 D3 | |
| C306 E4 | C633 B3 | D401 F4 | G28 G4 | P611A C5 | R52 C1 | R506 C3 | R667 D4 | Z653 D3 | |
| C307 F4 | C634 B2 | D402 F4 | G29 F2 | P701A D2 | R53 C2 | R507 C3 | R668 D4 | Z654 D3 | |
| C308 G4 | C651 C3 | D501 C2 | G30 F1 | P702A C2 | R57 D2 | R508 C3 | R680 A4 | ZD90 C1 | |
| C309 E4 | C652 D3 | D502 C2 | G31 G2 | P801A G1 | R58 D2 | R509 B3 | R681 A4 | ZD101 A5 | |
| C310 E4 | C653 D3 | D503 C2 | G32 G2 | P801B G1 | R59 D2 | R510 C3 | R682 A4 | ZD102 A4 | |
| C311 E4 | C657 D3 | D504 D4 | G33 F2 | P802A E1 | R61 D2 | R511 D5 | R686 A4 | ZD201 D4 | |
| C401 F4 | C658 D3 | D505 B3 | G34 G2 | P802B E1 | R63 D2 | R512 C4 | R687 A4 | ZD301 D5 | |
| C402 F3 | C659 C3 | D506 B3 | G35 G2 | PA01 F1 | R65 D2 | R513 C4 | R688 A4 | ZD501 C4 | |
| C403 G4 | C660 D3 | D507 B3 | G36 G2 | PJ201 C5 | R68 D2 | R514 C4 | R689 A4 | ZD651 D3 | |
| C404 G4 | C661 D4 | D508 C2 | G37 E3 | PJ241 C1 | R70 D2 | R520 C3 | R690 A4 | ZD681 A3 | |
| C502 D4 | C680 A4 | D509 D4 | G38 E3 | Q01 D1 | R72 D2 | R521 C4 | R741 G4 | ZD741 F5 | |
| C503 C3 | C681 A4 | D601 B2 | IC01 D1 | Q02 D1 | R74 D2 | R522 C4 | R742 G3 | ZD742 E5 | |
| C504 C3 | C682 A4 | D602 B2 | IC02 D2 | Q101 B5 | R80 D2 | R525 B3 | R743 E4 | ZD747 E5 | |
| C506 C4 | C683 A4 | D741 G4 | IC03 D1 | Q102 B5 | R81 D2 | R529 B3 | R744 G5 | ZD901 B1 | |
| C507 C3 | C685 A4 | D742 F5 | IC201 D4 | Q103 B5 | R90 C1 | R530 B4 | R745 E4 | ZD902 B1 | |
| C508 C2 | C686 A4 | D743 E5 | IC202 D3 | Q201 D4 | R101 B5 | R531 D3 | R746 G5 | ZD903 B1 | |
| C509 B4 | C688 A4 | D744 E5 | IC301 E4 | Q501 C3 | R102 B5 | R532 B3 | R747 E5 | ZD904 B1 | |
| C510 B3 | C741 G3 | D801 E1 | IC501 C4 | Q502 C3 | R103 B5 | R533 B3 | R748 E5 | | |
| C511 C3 | C743 G4 | D802 F3 | IC601 A2 | Q503 C3 | R104 A5 | R534 B3 | R750 E5 | | |
| C512 C3 | C744 G5 | D803 F3 | IC602 B3 | Q504 C3 | R105 A5 | R535 B4 | R752 D5 | | |
| C513 B4 | C745 E5 | D804 E1 | IC603 A4 | Q505 C3 | R106 A5 | R536 B4 | R753 E5 | | |




## WIRING DIAGRAM OF MC-84A

(THIS WIRING DIAGRAM OF MC-84A CHASSIS IS APPLICABLE AS FOLLOW MODELS: A/V STEREO, SOUND MAX MODELs)

# Service Sheet of MC-84A



# ce Sheet of MC-84A

## Service Sheet of MC-84A
## P/N : 3854VA0037A-S
## (990715)

IC901
TDA6107Q

IC01
CXP86324

IC02
24C16

IC202
CD4052B

IC840
KA7805AZ

IC841
KA78R08

IC802
4N35GV

IC804
SE115N

IC801
PC123

IC803
STR-F6654

T802

IC301 TDA8351

< A/V STEREO BOARD >

ICS01
TDA7429S

P611B

P610B

< TELETEXT BOARD >

IC701
SAA5231

IC702
7805

P702B

P701B

< TELETEXT BOARD for PARSI >

IC703
24C04

IC701
SAA5261

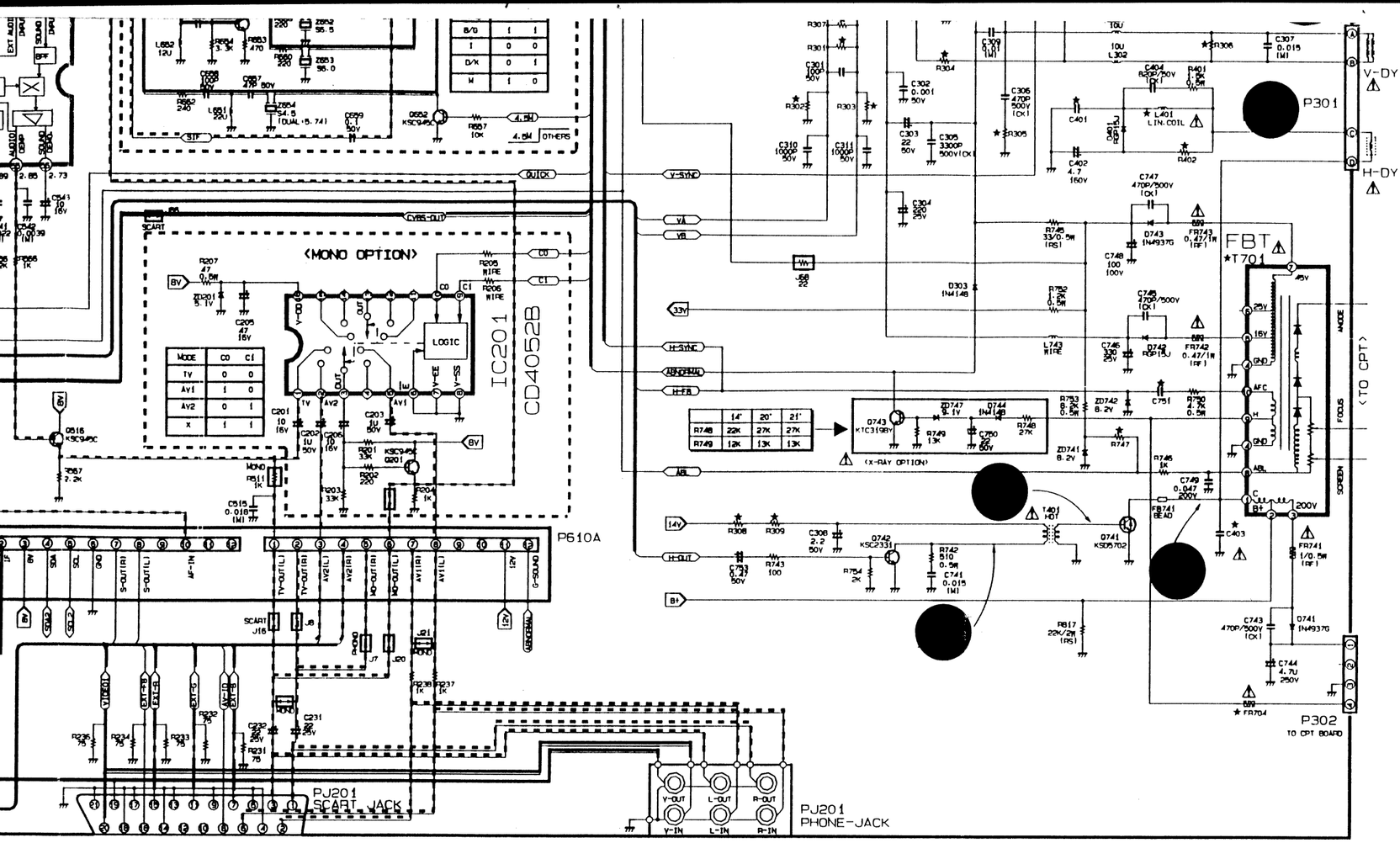
IC704
KIA7442P

P703

P701B

HOT

COLD


IC201
CD4052B
LOGIC
<MONO OPTION>
P610A
PJ201
SCART JACK
PJ201
PHONE-JACK
Y-IN
L-IN
R-IN
Y-OUT
L-OUT
R-OUT
FBT
T701
P301
P302
TO CPT BOARD
<TO CPT>
V-DY
H-DY
V-SYNC
H-SYNC
H-OUT
H-FB
ABL
FOCUS
SCREEN
ANODE
(X-RAY OPTION)
QUICK
CVBS-OUT
SCART
J16
J8
J7
J20
J21
J1
J2
J3
J4
J5
J6
J9
J10
J11
J12
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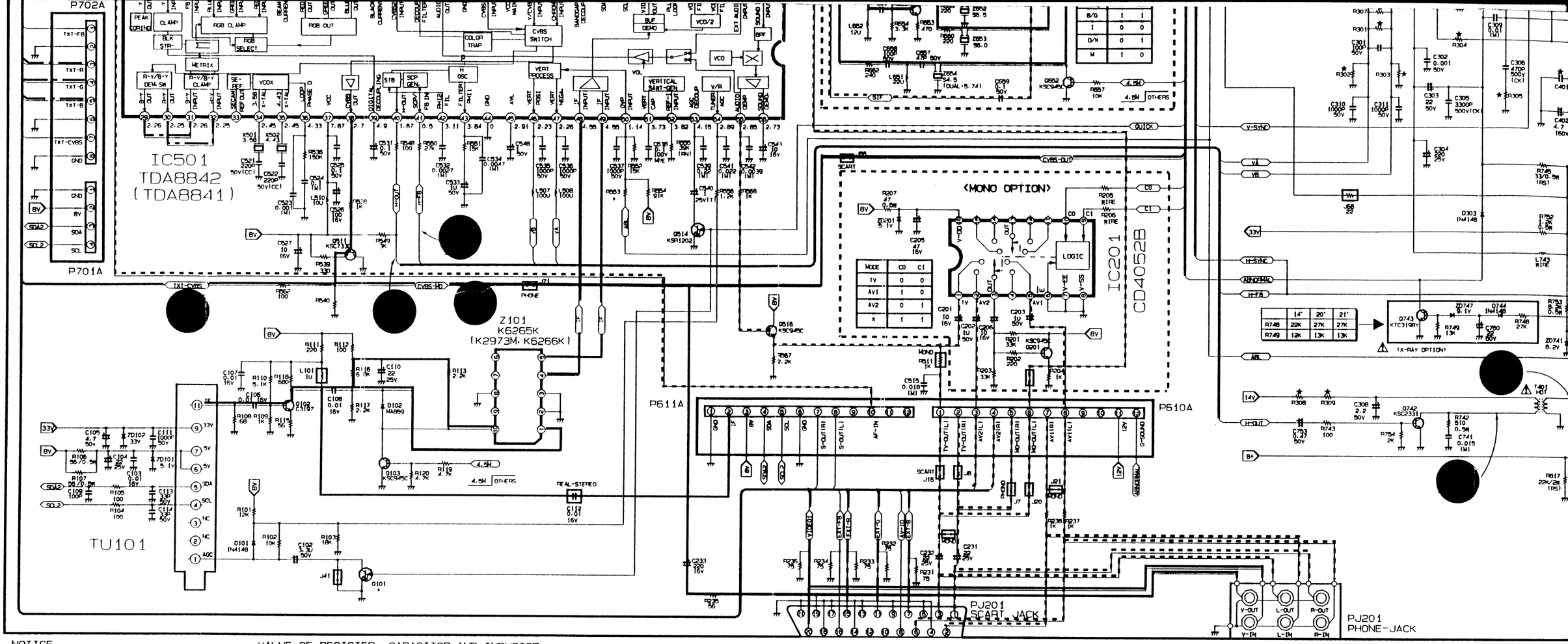


## NOTICE

Since this is a basic schematic diagram.
The value of components and some partial connection are suject to be changed for improvement without notice.

The components marked ⚠ conform VED or IEC guidelines and essential for safe operation of the TV receiver.
While those marked ⚠ are required for correct operation use specified parts only when replacing.

## VALUE OF RESISTER. CAPACITOR AND INDUCTOR

1. Resistor is shown in ohm. K=1,000 M=1,000,000
2. Unless otherwise noted in schematic. all capacitor values are expressed in uF.
3. Unless otherwise noted in schematic. all inductor values are expressed in uH.

## OBSERVATION OF VOLTAGE AND WAVEFORMS

1. Voltages read with VTVM from point to ground line voltages 180 - 270 volts color bar signal.
2. Voltages reading may vary +/- 20%.
3. The schematic shown is representative only.
4. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
5. Check FINE TUNING. AGC. BRIGHTNESS. CONTRAST and COLOR controls for best picture. make sure that BRIGHTNESS and COLOR controls are in mid position and CONTRAST controls is almost in maximum position.
6. Waveforms are taken using a standard color signal.

## TABLE OF INCH CONVERSION ( ★ : changing parts)

| NO. | LG 21 | LG 20 | LG 14 | ORION 20 | ORION 16 | ORION 14 | NO. | LG 21 | LG 20 | LG 14 | ORION 20 | ORION 16 | ORION 14 | NO. | LG 21 | LG 20 | LG 14 | ORION 20 | ORION 16 | ORION 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T701 | 6174Z-8005A | 6174Z-8005E | 6174Z-8005F | 6174Y-8003B | 6174Y-8003A | 6174Y-8003A | R747 | RD 5.1K | RD 5.1K | RD 5.6K | RD 5.1K | RD 5.6K | RD 5.6K | R402 | RS 27K 2W | RS 27K 2W | RS 22K 2W | RS 15K 2W | RS 22K 2W | RS 22K |
| C401 | MPP 0.36/200V | MPP 0.39/200V | MPP 0.39/200V | MPP 0.5/200V | MPP 0.39/200V | MPP 0.36/200V | R302 | RD 150K | RD 130K | RD 240K | RD 150K | RN 150K | RD 330K | FR901 | RF 1.0 2W | RF 2.0 2W | RF 2.4 2W | RF 3.3 2W | RF 3.3 2W | RF 3.3 |
| L401 | 170UH/50-L02C | 170UH/50-L02C | 57UH/50-LC1W | 70UH/50-L02Y | 160UH/50-L02AX | 160UH/50-L02A | RB31 | RD 240K | RD 240K | RD 130K | RD 240K | RD 130K | RD 130K | FR703 | RF 1.0 2W | x | x | x | x | x |
| C403 | 0.0073/1.6KV | 0.0075/1.6KV | 0.0068/1.6KV | 0.0075/1.6KV | 0.0082/1.6KV | 0.0075/1.6KV | R308 | RD 75 1/2W | RD 75 1/2W | RD 120 1/2W | RD 75 1/2W | RD 120 1/2W | RD 120 1/2W | FR704 | TIN-WIRE | TIN-WIRE | TIN-WIRE | RF 0.47 1/2W | RF 0.47 1/2W | TIN-WI |
| P901 | 6520VBC001A | 6520VBC001A | 6520VBA001A | 6520VBA001A | 6520VBA001A | 6520VBA001A | R309 | RD 75 1/2W | RD 75 1/2W | RD 120 1/2W | RD 75 1/2W | RD 120 1/2W | RD 120 1/2W | TH801 | 163-012C | 163-012C | 163-054F | 163-012C | 163-012C | 163-05 |
| IC804 | SE115N | SE115N | SE115N | SE115N | SE115N | SE115N | R301 | RN 3.3K | RN 2.7K | RN 1.5K | RN 2.7K | RN 2.2K | RN 2.0K | R305 | RS 220 2W | RS 180 2W | RS 220 2W | RS 220 2W | RS 220 2W | RS 220 |
| R901 | RD 220 | RD 220 | RD 220 | RD 220 | RD 220 | RD 220 | R303 | x | x | x | x | RD 220K | x | | | | | | | |
| R902 | RD 220 | RD 220 | | | | | R304 | RN 0.68 1W | RN 1.2 1W | RN 0.68 1W | RN 1.0 1W | RN 1.0 1W | RN 1.0 1W | | | | | | | |
| R903 | RD 220 | RD 220 | | | | | R305 | RS 220 2W | RS 180 2W | RD 20 1/6W | RD 20 1/6W | RD 20 1/6W | RD 20 1/6W | | | | | | | |
| R904 | - | - | RD 220 | RD 220 | RD 220 | RD 220 | R307 | RN 3.3K | RN 38K | RN 8.2K | RN 8.2K | RN 43K | RN 33K | | | | | | | |
| R905 | - | - | RD 220 | RD 220 | RD 220 | RD 220 | C781 | CD 0.01 | CD 0.01 | CD 0.01 | CD 0.01 | CD 0.01 | CD 0.022 | | | | | | | |